LARRY QUINSLAND: If you guys are interested in trying, you need to find a laptop. There are more that are open...
over here.

>>TODD PAGANO: He's not involved.

>>LARRY QUINSLAND: Do you want your own?

These have to be kept together. If you want to jump on one of these.

>> No. This is fine. We can share.

>>LARRY QUINSLAND: No. No. What I'm suggesting would be better is if both of you guys move over here because we've got three groups.

We got five there now. You've done this before. You haven't? Really? You haven't? Okay.

Good. To divide up the groups, we need two people to please move over here.

>> Okay. I think we're ready to begin. I'm the time cop here so that's my job, so I'm going to let you know when it's close to time to be finished, and I'd like to remind people about the evaluation for the workshop when we're finished. Okay? But I'm going to give it over to Todd and Larry now.

>>TODD PAGANO: Welcome! Welcome! Sorry about the room change. I'm sorry about all the last-minute movement, but we had a really good, nice room downstairs. Nice room. But not going to fit all the people here. So we had to change,
move to this room. So that's the reason for the movements, the last-minute adjustments here.

So before downstairs, 1400, LBJ 1400. Now here for the presentation related to computer mediated communication in the classroom. And really, we're focussing on IM, or AIM. We're going to use those two terms the same.

IM, instant messaging. You guys are familiar with instant messaging, I'm sure.

My name is Todd Pagano. So far, teaching here six years now. I teach in the science. All of my students are themselves science majors. I'm director of new program here, labs science technology. This is my friend, LKQ.

>>LARRY QUINSLAND: And our support, we have Tina and Carolyn is interpreting today, and back there, I'm sorry, Tammy. Thank you. Tammy's helping with CART.


Okay. How many people use for profession communication? Raise your hand.

The big question, important question. How many prevent your students from using instant message in the classroom? Sometimes becomes frustrating. Okay.
Really, the reason that we started this project is one day for, like, the 30th time, had to tell a student to stop using instant message, but started thinking about potential educational benefits of instant message technology.

>>LARRY QUINSLAND: For some of you this might look a little bit like other presentations you've gone to. This is where we are right now. Soon we'll be here. And then pretty soon after that, we'll be here. Right?

Some of you require a little bit more structure.

We're going to involve you in a quick activity so you can kind of experience what the students do in the classroom.

We're going to provide four examples of different ways we use them with students in and out of the classroom. Open it up if there's any time left for discussion. And then we have a brief feedback form that we would appreciate you give to us.

>>TODD PAGANO: So really, the whole concept, the technology of instant message entirely bloomed while I myself was in graduate school.

I graduated from bachelor's degree, okay, no instant message technology.

But two years working on masters degree, the entire field grew. So by 2002, registered users for AOL instant
messenger was about 315 million people using that.

In your paper, we have a link to an article the two of us recently published. In the article, it has a lot of statistics about how many people are using instant message today, the number of -- the billions and billions and billions of instant message estimated exchanged every day here -- well, in the world, really.

>>LARRY QUINSLAND: And it's good to notice also, '88, nobody knew about it.

But when were the kids who are showing up in college now born?

>>AUDIENCE MEMBER: '88.

>>LARRY QUINSLAND: Okay. And in the last ten years, they've grown up with total access, and they think that we did, too.

>>TODD PAGANO: Well, it's a good time to briefly talk about the current students we have in college here. Sometimes called the -- is there a sign for millennial? Is there a sign for -- millennial, or generation -- not generation X, generation text.

For those students, current students, college students, and K-12 students also, IM is an everyday tool used for communication. Every day they use that.
They have their abbreviations, you guys have seen them before, LOL, laugh out loud.

BRB, be right back.

Talk to you later, I don't know.

Sometimes these abbreviations showing up in college lab reports. Yes. Yes. Sad.

The current group of students often -- sorry -- often prefer using instant message instead of E-mail. And I mean they use, again, the article we published has a lot of statistics about how much IM is used every day. It's unbelievable.

So we decided why fight it? It's there. The students, their tool. They want to use that. Why fight it?

How can educators use that tool, IM, for educational reasons, educational purposes? We'll talk about that today.

There's a plug and a reference to our journal and inside, next, that's a link you guys have in your papers there, the link to find more information in our article publication.

Now we want to try -- are we doing the activity now?

Okay. Now we want to try a quick activity. So you guys can become familiar with the kinds of ways that we're using this technology in the classroom.

Okay. Right now, LKQ is going to invite the different computers to join a chat. So you should see a window pop up
asking you to join chat.

>> Todd, you have someone who came in who's not in a group yet.

>> TODD PAGANO: He has to do them one at a time.

Who has computers 6 to 10? 6, 7, 8, 9, 10?

Okay. Just respond and say hello.

>> LARRY QUINSLAND: There's a number in the corner of the keyboard, the right corner, that tells you what your number is.

>> TODD PAGANO: Seven doesn't have a person.

>> LARRY QUINSLAND: One is not responding. She can be seven.

>> TODD PAGANO: Does she have to move?

>> LARRY QUINSLAND: No. Nice thing about this, you don't have to sit together to be in the chat. Which is the reality with our students. My son is 20, and he'll sit in a room with his friends and they'll be texting each other, and they're just sitting right next to each other.

So you can see that from the teacher's perspective, I have 15 laptops that are all going at the same time. So then I give the instruction what to do, and then I can monitor all three discussions, jump in and out myself, ask a question, encourage, maybe provide information.
So what we're going to do is go back to -- this is your discussion that you will have with your group.

You guys talk to each other. This is the topic.

>>> LARRY QUINSLAND: Excuse me. Excuse me. Number one.

Number one.

You can understand how quickly we had to make up some rules related to how we're going to communicate when you're not looking at the screen.

So the students actually came up with the 9-1-1. That's the sign that -- everybody do this, all right, look at me.

Hands off. Look at me. And it works.

All right. So other rules that we have is we drop the abbreviations. Full words, all right, real language, please.

If someone does not understand something that another person typed, they do a 9-1-1. We stop, and then we clarify.

The person has to type it again in a way that's more clear.

So we are encouraging the use of proper language.

Now, each group will have one other opportunity now with a different topic.

So, first group -- John. Just left. John?

Okay. So first group, over here you guys are 6 to 10, all right? 6 to 10, this is your question. Go. Oh, wait a
minute. That's not your question.
Okay. This is your real question.
Second group, back, your question. That's group one and
five. Yours was the other one. Your group, all right, all
deaf. All deaf.
The back, mixed, deaf/hearing group.
Last group over here, this is out of classroom ways of using
this.
Talk to each other.
In real situations, the students' names are here instead of
the numbers. They actually invent their own symbol. They
can put their own picture in there. And then they use the
real name.

>>LARRY QUINSLAND: Okay. That was a taste -- how much time
do you think you guys were typing?
>>AUDIENCE MEMBER: Probably longer than we think. Probably
15.
>>LARRY QUINSLAND: It was five. It was actually five.
It's easy to get involved and time just -- you know, you got
a lot of time for discussion. A lot happens quickly
compared with a normal classroom discussion, where you're
controlling, you know, one person at a time. This way
things move way faster.
I'll give examples now -- I'm not going to switch back to the PowerPoint, but these are the -- this is what we're going to do. We've got four examples. One is in huge genetics class. -- human genetics class. I think it's a review for a exam. This one is students work in groups. I give them a topic. They have to put together a one-page summary paper in 30 minutes, including their references, the whole thing. They have to work together on that. I give them maybe five questions that they need to answer. The group has to come up with three more, and answer them. They have to include a list of new vocabulary that they didn't know before, and it's amazing in 30 minutes what can happen. Yeah. It's challenging.

The only rule is that they can't stop and -- all right? It's all keys. All right? If they have a question, they can ask me. I'll respond.

Then Todd's going to talk about interactions with respected scientists. You got one, right? Respected scientist? He knows one person.

And then finally, we just had last week, on Thursday, our first co-op chat with this summer's group of students who are out all over the U.S..

This is a review for a genetics test. Toss out a concept.
Group has to define the term.

I acknowledge a correct answer, that everyone can look at that.

All right. And they noticed.

Okay. This one, the topic was thalidomide.

Those of us -- some of us, some of us, remember something related to that. Others do not. Anyway, topics like that are great, and then the students can research and find out that, you know, in this situation, it's not all negative. There's still some very positive medical applications of this medication.

>>TODD PAGANO: Okay. I want to chat a little bit about -- discuss a little bit about communication with people not on campus. You know, somebody in science is actually working in the field, okay, so I'm teaching a topic like some chemical technique, and instead of me preaching, lecturing, to the student about that chemical technique, I will contact a friend of mine working for a pharmaceutical company, working in the field, and set up a chat with the students in my class and that expert working out there.

It's nice because financially, it is challenging to fly people here to present all the time, okay. That person working, enter their office, can, 30 minutes of their time
from their office, have a chat finished. It's like bringing
a virtual presenter to the classroom.

This is one example of a visitor we had chatting with the
class. This person was at a pharmaceutical company. It's
nice. You see the students asking specific science
questions. Beer's Law is not Beer's Law, it's an actual
physical thing, so they're asking about the different
chemicals, principles, concepts.

The visitor is reinforcing the things they learned in class.
Let me ask you: How many of you guys sense that this was
too fast, reading this, challenged to keep up with the
typing? Some people?

Yeah. Some people are not comfortable with the instant
message technology.

>>AUDIENCE MEMBER: It was more that the conversations are
in sync with one another.

>>TODD PAGANO: It's fast, and the students themselves are
faster. The students themselves are faster.

Recently contacted a Nobel Prize winning scientist. A Nobel
Prize winning scientist I worked in the past with in grad
school. Explained to my class of students, we'll have this
big scientist chatting with you guys. My students were
scared. Scared. I told the scientist he had to use instant
message technology. He was more scared.

It really leveled, it leveled the field. The students --

the scientist, he was at Harvard, was way behind, way behind

the conversation. The students are going fast. So sort of

really evens the playing field.

Every year we have in my program about 15 students go and

have internship co-op, throughout the United States.

So we set up a time, typically Thursdays about 9:00. Why?

Because some people on the west coast have to finish work.

So evening about 9:00, we have people in California, people

in New Jersey, all over the country. Yes?

>>LARRY QUINSLAND: It's time to brag a little bit. We have

a student AAS level at Stanford doing research this summer.

The other students he's working with are masters level and

above.

>>TODD PAGANO: And of course --

>>LARRY QUINSLAND: And, and he's showing other students how

to use some of the instruments.

>>TODD PAGANO: Now I forgot.

Oh, so of course, of course we want our students to continue

with a good reputation to NTID, so we want to have weekly

chats.

Why? We want to make sure students socially okay with other
workers, want to make sure the students understand the topic of their research, if there are any technical questions, we want to resolve them. What other kinds of questions? Communication questions, of course. Most of the students working alone, deaf student with a lot of hearing people, first time doing that maybe, okay? Want to resolve these issues before the issues become big, big situations. It's a real nice opportunity to stay in contact. We set up the time limit, one hour. It never finishes in one hour. Typically, the students want to continue chatting, discussing, two hours, three hours. Yes, it requires faculty time to sit down, control the group, but it's a really good dynamic opportunity for communication.>

>>LARRY QUINSLAND: And the students look forward to it. And sometimes their issues are different, so we'll separate them. And we'll have students who want to talk about communication issues in one group, and then others technical stuff in another, so there's flexibility there.>

>>TODD PAGANO: And the students learn from the other students' issues. So it's continuing the educational process while the students are off campus working on a co-op.
>>LARRY QUINSLAND: Okay. I think we're at discussion point.

>>AUDIENCE MEMBER: Do you do that during working hours or do you do that after work?

>>TODD PAGANO: We have the co-op summer chat after work, finish work. I mean, that's why we establish it at 9:00, so the students themselves working on the west coast finish. So evening for the students. Don’t want to interrupt their workday progress.

>>AUDIENCE MEMBER: How often do you use that?

>>TODD PAGANO: Different -- the co-op chat or instant message in general?

Okay. I think LKQ uses a lot more than me. I myself, I like the field of sciences experts. That's mostly where I use that. I have a lot of network, you know, people I work with, president of the American Chemical Society, people that want to be involved with our students, but time, travel, can't happen.

So I myself more use it for chatting with scientists out there. So I try to do it every time I introduce a new topic, a big chapter, I try, but not always. Maybe three times a quarter.

Can you answer that question? They want to know how often
you use instant message in the classroom.

>>LARRY QUINSLAND: Twice a week.

>>TODD PAGANO: Twice a week with different --

>>LARRY QUINSLAND: Each group, but different -- yeah, different focusses.

>>AUDIENCE MEMBER: The ability to control the access of the student --

>>TODD PAGANO: So to stop the chat in the middle of a conversation?

>>LARRY QUINSLAND: That's when I use the 911.

>>AUDIENCE MEMBER: It's a rule.

>>LARRY QUINSLAND: It's a rule. And everybody stops. And if the student doesn't stop, the other students will go --

>>AUDIENCE MEMBER: And he's saying there are students who are breaking the law -- the rule.

>>TODD PAGANO: While the teacher's lecturing, the student is -- yes. Yes. Yes.

>>LARRY QUINSLAND: Oh, okay. Yeah. No, we -- it's very interesting that that that's been a topic of discussion at RIT all over recently is students using their laptops to, you know, play games or, you know, IM with friends or whatever. And, you know, my philosophy is that we set up a rule for that. I don't allow students to text in class. I
say cell phone, I don't use it, all right, I don't text.

That's a rule in this room. All right. And I say the same
thing with laptop.

If it is class related, all right, go ahead. But if I see
one time it's not, you're finished for the quarter. It's
shut all the time.

So, you have to be strict, set that.

>>AUDIENCE MEMBER: Okay. You were talking about using IM,

you know, when you have IM text only, no signing, what is

your thinking about using both text and sign, or when do you

use sign alone versus text alone or text and sign?

>>LARRY QUINSLAND: Good question. It's dependent on the

activity. If it's a review, that's it. If it's group

research and they're kind of -- they've kind of hit a wall,

all right, then we'll do this, and maybe the group and me

will have a brief discussion. And then back. But I didn't

participate very much in your chats today. In fact, not at

all. Normally, I'm there.

And in fact, I use a 17-inch, then I can get sometimes four

groups going.

>>AUDIENCE MEMBER: Just a follow-up. Why are you being so

strong about using --

>>LARRY QUINSLAND: The primary reason is there's a record
of it. I can print everything that you guys said today, and will. It's an opportunity for us to learn something about, you know, who's attending the session. There's no names attached to it. It's numbers, so, all right, your privacy is respected.

In class, though, we can have -- sometimes a review is 25 pages. I don't have time while it's going on to really monitor each student and how they're doing. At the end, I can print it out, I can read through and I can see some weaknesses in a few areas. Then I can approach that student one on one.

So it's primarily -- it's an aid to me because while -- you know while you're, you know, having a discussion over here there's other stuff going on over here that you're missing.

>>AUDIENCE MEMBER: I guess kind of as a follow-up, then, if you're not seeing participation, like, you know, six students out of 15 are chatting back with you, then I guess that's also an indication that they're not engaged in the process.

>>LARRY QUINSLAND: There are little nuances that pop up that you learn. One is that the fast typos win. So what I do after about 15 or 20 minutes is -- and they get to know who and just by eye contact, you know, they know that just
hold off a little bit, let somebody else jump in.

But initially I will, you know, make a point of raising them and saying okay, you guys, I want to hear from you guys, all right? Everyone else please hold until that happens.

But the other thing is that -- it's like any group, you know, I tell the students, any group like this, you got 50% who don't care. They'll stand up in front and, you know, they're comfortable with that. The other 50% would prefer to die.

Well, it's the same -- that carries over to participation in other ways, too.

The other thing is that these guys have not had a lot of opportunity doing team work, which is why the research is really, I think, helping out a lot.

We have students where we do a -- they get a memo from a CEO, all right, with ab assignment, and the 12 students have to maybe test the three bottles that arrived FedEx and see if they are, in fact, equal concentration, or if there's a problem with QC in the lab or in the production.

Well, they have to divide up into groups, who's going to do what, and it's a big struggle just in the last five years to get these students to work together. They haven't had the practice.
You know, before, students would come home, they'd come home from school, they'd go outside and they'd play, they'd get into hassles and have to work it out. They come home, they work at home, it's all alone activity.

So then you have the collaborative research, they're forced to work together, and it actually, I think, is beneficial.

>>MODERATOR: You need to finish soon.

>>TODD PAGANO: Our time is up. But I think lunch is next.

But we're willing to stay and chat more if people come up and have questions. We'll do that.

>>LARRY QUINSLAND: Please take one minute and fill out the processing form, give us some feedback. If anyone needs more handouts, I just ordered some. They should be coming.