10:12:55 From Sarah MacGillivray to All panelists: Great job, Joyce!
10:13:36 From Joyce Malyn-Smith to Pat Riley - Webinar Coordinator (Privately):
We forgot About the Polls. Can we add the first poll after Suzanne speaks?
10:14:19 From Pat Riley - Webinar Coordinator to Joyce Malyn-Smith (Privately):
Whenever you are ready. Just let me know. I also got a question about the definition of "middle skill data practitioner". Can you address that when you get the chance?
10:14:20 From Joyce Malyn-Smith to Pat Riley - Webinar Coordinator (Privately):
I'll ask you to put up the polls after Suzanne speaks.
10:14:35 From Paul Hansford: knime is a great open source tool!
10:15:02 From Kelly Fitzpatrick: This is 24 credits. Is that a lot for a certificate at a two year college?
10:15:20 From Paul Hansford: comparable to tools like alteryx etc.
10:16:28 From Joyce Malyn-Smith: The Data Practitioner is a job title created by the expert panel to describe the work they held in common as middle skilled data workers. They defined the Data Practitioner as a person who "in service of an organization and/or stakeholders, supports the data life cycle by collecting, transforming, and analyzing data, and communicating results in order to inform and guide decision making."
10:16:41 From Michael Harris to All panelists: It depends on what the goal of the certificate is, 24 is a good amount for a decent introduction to the field.
10:16:47 From Paul Hansford: there are levels of certificates with various credit levels.
10:17:04 From Jeff Thies: @ Kelly No, relatively normal cert size. Some as low as 18, some as high as 30.
10:17:21 From Kelly Fitzpatrick: Thank you.
10:18:27 From Sarah MacGillivray to All panelists: We're doing great on time, fyi.
10:18:32 From Kelly Fitzpatrick: How many students at Johnson CC?
10:18:49 From Radhika Ramjee to All panelists: Do you use R programming at all.
10:19:06 From Michael Harris to All panelists: I will talk a bit about it, but I do in my courses.
10:19:17 From Jeff Thies: Greatest challenge is COVID moving our focus.
10:20:20 From Paul Hansford: We have Math courses that have R in them.
10:21:05 From Kelly Fitzpatrick: We also run R in our Stats and DS courses. We are using Python in the computer science classes.
10:22:05 From Jennifer Travis: Pat, I'm curious.... how many people are attending the webinar?
10:22:49 From Pat Riley - Webinar Coordinator: We currently have a little over 50 in attendance. It has been fluctuating between 50 and 55.
10:23:29 From Paul Hansford: We have a python for analytics course in CS as well which is common for dat analytics related courses.
10:23:29 From Suzanne Smith to All panelists: We used R along with Python for a couple of years. Lately, all instructors have moved to Python.
10:23:39 From Joyce Malyn-Smith: Most of our colleagues consider middle skilled data workers to be those people who work on data teams - contributing various tasks to the full data effort.
10:24:13 From Joyce Malyn-Smith: A middle skilled data worker would, for example, not be the data scientist leading the effort - but be part of the work team carrying it out.
10:25:34 From Wayne Lewis: Michael Harris and I share geographic and familial sleep deprivation data.
10:25:53 From Maula Allen to All panelists: which industries were/are being consulted?
10:26:39 From Jerome Tuttle: Absolutely agree with domain specialization. I have seen analyses from people who clearly did not understand an industry, and their analyses were foolish.
10:27:59 From Joyce Malyn-Smith: We have also found the Gap Analysis tool to be a useful tool in generating dialog between the colleges and their business partners - because it focused on the tasks included in the profile, with the specificity of the verbs, the resulting dialog has been energetic, focused and resulted, often, in a closer relationship between the college and local employers.
10:28:00 From Paul Hansford: We have done this all well through certifications in areas of specialty: GIS, Healthcare, marketing, Accounting, UAS, etc. spreading out data analytics offering across the campus
10:28:54 From Kelly Fitzpatrick: Where will the sides be posted? AMATYC prof. Development page?
10:30:10 From Julie Hanson: The recording and slides will be posted on AMATYC's webinar webpage, as well as the AMATYC Statistics Resources webpage. It usually takes a week or two before they are posted.
10:30:29 From William Velez: I am interested in programs that link the CC curriculum with that of a university. How many examples are there of CC/university partnerships that have managed to create a seamless program of study for students to allow them to complete a 4 year degree. What are the barriers in creating such a partnership?
10:31:18 From Jeff Thies: First level certs with Statistics, do your MAT Stats courses have a College Algebra Prerequisite? If so is that a challenge for industry students?
10:31:18 From Paul Hansford: It is usually the math requirements that make the articulation paths possible
10:31:25 From Pat Riley - Webinar Coordinator: The PowerPoint and recording will be posted on the Webinar section at amatyc.org within the next day or so. In addition, I will send these by email to all who register.
10:32:08 From Lynette Painter: We have a CC/University partnership with our program; the challenges included not having too many credits at the CC level before transferring to the university within the program requirements
10:32:56 From Jeff Thies: Are the programs available fully online?
10:33:10 From James Polzin: http://minneanalytics.org/
10:34:33 From Kelly Fitzpatrick: Do you have the link to this matrix?
10:34:49 From Suzanne Smith: Some of our courses are taught online but not all yet. In the fall, those that are not totally online will be taught
remotely using Zoom. We hope to eventually move all courses online.
10:35:20 From Suzanne Smith: We used R along with Python for a couple of years. Lately, all instructors have moved to Python.

10:35:37 From Lynette Painter: Most courses are offered online in our program.
10:36:13 From Jerome Tuttle: There seems to be some rivalry between R and Python. I am a fledgling here, but my broad generalization is that math folks prefer R, and computer science folks prefer Python. As a quick example, in R it takes me one command to open and read a file. In Python it takes one statement to open a file, and a second statement to read it. In R it takes me one statement to do a square root. In Python it takes me one statement to open the math library, and a second to use it to a square root.
10:36:55 From Kelly Carey: will recording of this be sent out?
10:37:20 From Pat Riley - Webinar Coordinator: The PowerPoint and recording will be posted on the Webinar section at amatyc.org within the next day or so. In addition, I will send these by email to all who register.

10:37:25 From Yeng Miller-Chang: As someone who has used R and now uses Python for my current data analyst position, I am glad that I am starting students out in R rather than Python, since using Pandas (in my opinion) requires some understanding of object-oriented programming to use effectively.
10:37:37 From Kelly Fitzpatrick: Jerome I agree - I am in math so I use R. I don't want to learn Python so our CS folks picked that up.
10:37:49 From Susan Uland: Will it be possible to save the chat information? Thanks!
10:38:03 From Pat Riley - Webinar Coordinator: Yes, I can save and send the chat as well.
10:38:33 From James Rauff: Our data science program is a track within the mathematics major. We use Python.
10:38:47 From Sarah MacGillivray: We will share links to where you can access these tools later in the presentation.
10:38:56 From Kelly Fitzpatrick: So nice to hear others using Tableau. I just taught myself how to use it. I think it is great!
10:39:22 From Michael Harris to All panelists: I would like to say they R and Python are complementary rather than competing. There are some things that R does well and others Python does well. As a generalizations though, R tends to me more for math because it is an open source statistics language, whereas Python is a full blown computer language which does statistics. Depending on the company though, they may have R, Python, SAS or some other language.
10:41:12 From Annie Han: What is the diff bet Level 3A and 3B?
10:41:13 From Jennifer Travis: Can someone talk about the credentials needed for faculty to teach these courses? Who can teach them? Do the different accreditation bodies have similar requirements in different parts of the country?
10:41:18 From Sarah MacGillivray to All panelists: Presenters - Joyce will pick up after Paul, then I'll read off a couple of questions. Feel free to add your thoughts once she's done, then I'll read off some questions.
10:41:48 From Pamela Pape-Lindstrom to All panelists: I am also interested in learning about how to determine appropriate faculty credentials.
Thanks.

From Maula Allen to All panelists: what was the process in finding faculty who could teach the data analytics courses (ML, viz, …). Are there pre-quals to be able to teach the courses.

From Robert Tudor to All panelists: Sarah: can you have Paul speak to the Level 3A versus level 3B Associates.

From William Velez: I want to mention a semester broad program in Mexico in data analysis. Here is the website: https://mathsciencesgto.cimat.mx/

From Paul Hansford: The difference is calculus courses for articulation

From William Velez: I want to mention a semester abroad program in Mexico in data analysis. Here is the website: https://mathsciencesgto.cimat.mx/

This is held in the spring semester. I am the chair of the advisory committee for this program and would be happy to provide any further information.

From Suzanne Smith: To teach our courses, we require a masters degree in either mathematics, data science, or computer science. If there is not a masters degree but 18 hours or more in those areas, then they can be considered if they also have some good industry experience.

From James Rauff: We've placed graduates with agribusiness, insurance, aerospace, and gambling casinos.

From Paul Hansford: for industry in the Midwest, we have an Air Force base near by, large hospital system, and lots of mid size companies tech, manufacturing etc

From Kelly Fitzpatrick: I think there are more business analytics at 4 years

From Paul Hansford: our next challenge is working on pathways to near by 4 year schools and marketing of our data related programs

From James Rauff: Try us: https://millikin.edu/mathematics

From Radhika Ramjee to All panelists: I have to do the R and statistics course next spring. Could I get some help to develop the curriculum. I am in the math department

From James Rauff: If you have an associates degree and calculus, you can transfer seamlessly.

From Rick Cleary: Bill Velez and I are co-chairing a national task force sponsored by TPSE Math (www.tpsemath.org) on alternate pathways to math major; including ones that don't necessarily start with calculus. We hope to publicize the kind of four year programs you need, and encourage more math departments to take part. Please contact either of us if you have ideas in this area.

From Maula Allen to All panelists: what have enrollments been like

From Jennifer Travis: The math department at big university near us (most common destination for our transfers) just started offering a new degree option: BS in Mathematics - Data Science Option

From Kelly Fitzpatrick: Our stats requires a non credit algebra class - not college algebra

From Yeng Miller-Chang: For the program I am in, there is a new 4-year program which requires Calc. I through III, and requires two semesters of calculus-based statistics as part of the major
From Yeng Miller-Chang: Correction: For the (two-year) program, there is a *local* 4-year program.

From Paul Hansford: in Ohio to teach, I think you need 18 hrs of domain experience (CS/IT etc) for HCL requirements.

From Michael Harris to All panelists: Radhika, open into to statistics from Duke uses R along side learning stats up through linear regression.

From Jennifer Travis: Suzanne, most of our math faculty have a MS in math but would not have the knowledge to teach theses courses....I assume you would also vet their knowledge? But just having the MS is enough to be "qualified on paper"?

From James Rauff: Our data science faculty have graduate degrees in mathematics, computational linguistics, business, and statistics. We all retrained.

From William Velez: This has been a very informative presentation. Thanks.

From Joe Ippolito to All panelists: Great job all!

From Kelly Fitzpatrick: This was excellent thank you!

From Maula Allen to All panelists: how have industry adjuncts been able to adapt to teaching and various students' needs -- any program in college to help them adapt?

From Sarah MacGillivray to All panelists: https://go.edc.org/BigDataCareer

From Sarah MacGillivray: Tools presented: https://go.edc.org/BigDataCareer

From Lynette Painter: This was great - thank you!

From Paul Hansford: we do offer courses face to face, online, hybrid, and CBE for most all of the CIS/IT courses

From James Rauff: Thank you panelists and Pat. Very helpful!

From Paul Hansford: face to face is a little challenging with COVID

From Pamela Pape-Lindstrom: Thank you! Great information!!

From Matthew Pragel to All panelists: Thank you!

From Robert Tudor to All panelists: Thank you, panelists! Well done!

From Annie Han: THANK YOU!!

From Maula Allen to All panelists: thank you very much! great information

From Jennifer Travis: Fantastic webinar, thank you so much to all the panelists!

From Brent Wilson: Thank you! Great information! Very well presented!


From Margaret Rejto: Super webinar - thanks to all!


From Joyce Malyn-Smith to All panelists: I think we are done.
From Suzanne Smith: We require the adjunct interviewees to do a teaching demo so we are able to find those who will be good with students.

From Julie Guelich to All panelists: Thank you! Excellent presentation.


From Paul Hansford: thank you AMATYC!

From Radhika Ramjee to All panelists: I have to do the R and statistics course next spring. Could I get some help to develop the curriculum. I am in the math department

From Michael Harris to All panelists: Hi Radhika, e-mail me at mdharris@bhcc.mass.edu

From Rick Cleary: Wonderful webinar, thanks!

From Paul Hansford: Radhika joing the community of practice

From Kendrick Hang to All panelists: Thank you, all!