00:18:01 Trena Wilkerson: Hello from Waco, TX via Philadelphia, MS! Greetings from Springfield, MO! Cindy Bryant: 00:18:12 Trena Wilkerson: Hello from Waco, TX via Philadelphia, MS! 00:18:14 00:18:27 Carol Matsumoto: Hi from Winnipeg Hello from Arizona! This is my 4th 00:18:33 Elizabeth Sawyer: Peta-Gaye Benjamin: Hi from AZ 15 sessions 00:18:34 00:18:35 Cherish Alberts: Hi from Virginia!! Claudia OKeefe: Hi from Buffalo, NY! 00:18:36 David Brancamp: Hi from Carson City, Nevada 00:18:36 Hayward, CA 3 sessions 00:18:37 Marina Xavier: 00:18:37 LANY JAMERO: good morning from philippines Gil Geeran Bangeles: 00:18:40 Hello from Philippines! Tanya Landry: Hello from Baton Rouge! 00:18:40 00:18:40 Kendra Edwards: Hi from Brooklyn, NY 00:18:43 Andréa Chew: Hello from Spotsylvania, VA Cindy Bryant: Please set your chat to "All panelists and 00:18:45 attendees" so that everyone will be able to see your chat posts. Vito Di Leo Jr.: Hi from Brooklyn, NY 00:18:46 Daniel Irving: Hello from North Providence, RI! 00:18:47 Cary Mallon: Hello from Oregon 00:18:47 Kathleen Morris: Good evening from northern VA ~ too many 00:18:47 sessions to count! Hi from Maryland! 00:18:49 Rachell Scott: 00:18:53 Cary Mallon: My second session Best wishes and love from Nashville, TN 00:18:54 Aya Zvaigzne: Sharon Black-MacKinnon: Greetings from NB Canada. This is my 85th 00:18:54 webinar! Very grateful for this opportunity!! Nora Marasigan: Hello from Philippines. 00:18:56 00:19:00 peter zirnis: Hi from Etobicoke Ontario Hi from NC 00:19:00 Ramona Hall: Hi from Pine City, MN 00:19:01 Tami Nelson: hello from Everett WA. this is number 37 for 00:19:02 marissa heitman: me. and its 4 pm here! 00:19:02 Michael Chrzan: What up doe?! From Detroit, MI Carmen Guzman: Hello from Florida 00:19:03 85!!! Wow! 00:19:05 Ramona Hall: 00:19:07 Perri Piercev: Hi from Nashville, TN I've attended to many sessions to count 00:19:11 Keri Naso: Wisnu Siwi Satiti: Hello everyone! Good morning from Indonesia 00:19:11 00:19:12 Lisa Galanes: hello from il Good Evening from Mastic Beach, NY 00:19:14 Debra Cowan: 00:19:16 Lisa Galanes: TL 00:19:19 Ava Zvaigzne: Nashville represents :D Hello from Bealeton, VA. 00:19:24 Linda Koval: Olga Kosheleva: Hello from El Paso, TX, attended all of webinars. 00:19:25 Lisa Aldous: Hello from Arnold, Maryland! 00:19:30 hello from Calgary, Canada!!! 00:19:31 Kim Petersen: Hello from Kansas! 00:19:32 MaryJo Swann: Jacqueline Colbourne: Hello from MD 00:19:35 00:19:35 Rosalyn Bantay: Hello from Philippines

00:19:40 Ramona Hall: Love Calgary! LF W: Good morning from Singapore! 00:19:44 00:19:45 Randolph Chapman: Hello from NYC 00:19:48 Karen Laurent: Greetings from Delmar, NY! This is my fourth session! Georgina Coffin: Hello from Fircrest, Washngton 00:19:48 Christina Tully: 00:19:54 hi from Las Vegas, NV! Stephenia Courtney: Hello from Las Vegas, NV 00:19:56 Justin Klinger: Hello From Romeoville IL 00:19:59 Hello from Cebu, Philippines 00:20:00 Elmer Mayol: Emerlina Binuya: Hello! I'm Emerlina from Petersburg,VA 00:20:00 00:20:09 Kathleen Kustura: southern california Jorge Veloso: Hi from Angola. 00:20:15 00:20:17 Amanda Alfieri: Hi From California! 00:20:27 Don Duong: Hello from Portland Oregon Carol Treglio: Hi from San Diego 00:20:35 Hello from Chicago 00:20:37 Melonie Smith: Hello from Tennessee! 00:20:45 Lesly Brown: Greetings to All, Mohamed, CT 00:20:55 Mohamed T: hello from Pittsburgh 00:21:03 Mary Lynn Raith: Nicole Rigelman: Hello from Portland, Oregon :) 00:21:10 00:21:17 Julie Herron: Hello from Wisconsin 00:21:25 Shashidhar Belbase: Hello from the United Arab Emirates (UAE) ! Emily Kavanagh: Hi from Columbia, MD 00:21:26 Hello from Fayetteville, Arkansas 00:21:28 Lorie Huff: 00:21:28 Patricia Daugherty: Hello from San Francisco, CA 00:21:32 Carol Matsumoto: Great seeing you again Diane. It's been awhile. 00:21:37 Cary Mallon: hello from Oregon, I attended yesterday also Barbara Post: Hello from Orange, CA 00:21:51 Please set your chat to "All panelists and 00:22:09 Cindy Bryant: attendees" so everyone can see your chat posts. Yvonne Holloman: Hello from Virginia! 00:22:17 00:22:26 Mary France Imperial: Hello from Philippines Please set your chat to "All panelists and 00:22:51 Cindy Bryant: attendees" so everyone can see your chat posts. Donna Misciagna: 00:22:59 Hello for Tucson, AZ hello from dana novi mi 00:23:11 dana dulzo: Laurie Harrell: hello from Harpers Ferry, WV 00:23:24 Please set your chat to "All panelists and 00:23:42 Cindy Bryant: attendees" so everyone can see your chat posts. LeAnna Deveaux-Miller: Good Evening From New Providence, THE 00:23:44 BAHAMAS Hello from Philippines. 00:23:45 Myra Absin: Welcome from all over the world! Cindy Bryant: 00:24:06 It is okay, I had to do this with my 10-year-old 00:24:10 Linda Koval: today. She had to help me. from Chilliwack bc 00:24:13 Deborah Alexander: Sara Rengstorf: Hello from Virginia 00:24:23 00:25:03 Jonathan Marcovitz: Greetings from Fort Lauderdale

00:25:29 lee hanby: hello from ashburn, va Pam Cadena: Hi from my classroom in Redondo Beach, CA 00:25:44 00:25:58 Good morning, .. from the Philippines Rogelio Lapulapu: 00:26:02 Winnica McLean: Hello from Florida "Bug-bear" - love it! 00:26:16 W Gary Martin: Rhonda Perkins: Hello from Virginia 00:26:21 I am at the mercy of state tests for my evaluation 00:26:22 Aya Zvaigzne: and school funding, and possible school takeover. Very interesting indeed! Cindy Bryant: 00:26:24 Honey Sacro Swem: 00:26:25 Hello from Redlands, CA 00:26:33 BABY ANN ZAMORA: Good morning from the Philippines 00:26:44 Michael Welch: Boston Powerful document!!! 00:26:50 Cindy Bryant: 00:26:56 Betty Stallings: Hello from VA 00:27:08 aurora gonzales: good morning from Phil Hello from MD, USA :) 00:27:33 Carly Jardinier: 00:27:50 Ethan Weker: Hello from Northern California! 00:28:00 Cindy Bryant: Oh yes! Ruby Maghirang: Hello from Baltimore, Maryland 00:28:34 Gloria Flores: Hello from Texas 00:28:42 00:29:01 Tameillia Cain: Hello from Atlanta 00:29:05 Comlavi Diondo: Hello rom New Jersev 00:30:09 Mary France Imperial: hi @Baby Ann :) 00:30:32 BABY ANN ZAMORA: Hi Ma'am France Faith Peddie: @Katina Do you teach at Lewport?! 00:37:55 Susan Bardenhagen: I remember when those books came out- NCTM 00:38:31 had brochures for every group- parents, teachers, business leaders, and students. I still have one of each that I used at a STEM careers conference. =) 00:38:54 Trena Wilkerson: Awesome Susan! Tara Fulton: Yes! That first was is mine :) 00:39:50 Linda Koval: 1st one. 00:39:51 Scalene all the way! 00:39:55 Ethan Weker: 00:40:03 Stephenia Courtney: 1st 00:40:05 Alex Freuman: Scalene for me too. :) Wisnu Siwi Satiti: 1st one 00:40:07 I still have almost all of those documents and I 00:40:08 Barbara Post: have been retired for over 14 years but still work with teacher candidates. 00:40:14 W Gary Martin: + 1 for scalene! Susan Bardenhagen: 00:40:15 Hi, Trena, 00:40:38 Michael Chrzan: Ooo, this is GOOD! 00:40:54 Ruby Maghirang: 1, 5, 7, 10 00:40:55 Tara Fulton: 1,5,7,10 Different orientations and sizes 00:41:02 Tara Fulton: 00:41:07 Alex Freuman: It may highlight misconceptions. How many triangles can you see? 00:41:21 Aya Zvaigzne: 00:41:21 Winnica McLean: 1,5,7,10 Justin Klinger: They knew what wasn't a triangles 00:41:26 00:41:30 Aya Zvaigzne: I see lots of them. 1, 5, 7, 9, 11, 10 Mary France Imperial: 00:41:33 00:41:36 Linda Koval: Yes!

00:41:43 Ethan Weker: On a plane? Curved surface projections? Could add 3, 14, 13 00:41:48 why do the sides have to be straight? Aya Zvaigzne: Michael Chrzan: 3 and 6! 00:41:56 W Gary Martin: @Etahn that was what I was thinking! 00:41:59 00:42:23 Linda Koval: Line segments are straight. Came up with students today in my math club. 00:42:34 Ethan Weker: Michael Chrzan: That's such an amazing distinction for kids to see 00:42:37 and understand about mathematics though! Trena Wilkerson: Hello Susan! 00:43:01 00:43:17 Rachell Scott: 10 is object 00:43:38 Honey Sacro Swem: Can see students' misconceptions based on their responses when using this assessment 00:43:57 Justin Klinger: How we draw them 00:43:59 lee hanby: we always draw them that way Rachell Scott: 00:44:05 Taught 00:44:10 Alex Freuman: Always! Justin Klinger: I have purposely draw them differently 00:44:28 00:44:28 Aya Zvaigzne: third question is gold Linda Koval: When I taught Geometry, I had to teach students to 00:44:38 redraw the triangle because they didn't see the triangle the way it is presented to them. 00:44:55 Comlavi Djondo: all depend on the definition of triangles that were given earlier during the lessons Tameillia Cain: that concept (how they view thehas to be developed 00:45:12 in elementary 00:45:26 Susan Bardenhagen: I never thought about "upside down" or facing the "wrong way". But, I have gotten left angles and right angles..... =) 00:45:38 I love the sometimes, always, and never questions. Linda Koval: 00:45:57 Tameillia Cain: that concept (how they view triangles) has to be developed in elementary What an amazing partition problem! 00:47:57 Linda Koval: 00:48:29 W Gary Martin: Oh no! Emily Kavanagh: Great example 00:48:47 00:49:13 Rachell Scott: Yeah, a good example. higher level thinking 00:49:20 Stephenia Courtney: The dentist problem was great because if his rule 00:49:47 Linda Koval: applied, then it would work for 3 out of 5 dentist. The student would realize that his/her method did not work. 00:50:14 Aya Zvaigzne: Maybe make the students draw a shape of their own choosing and then come up with a way to find the area? @Linda good point, but would be even easier to see 00:50:55 Ethan Weker: with 5 out of 5 - should be 100% but comes to 25% which seems intuitively more wrong/easier to see it's wrong than the 3 out of 5 (15% vs 60%) lee hanby: design garden with various areas 00:50:56 00:50:57 Tanya Landry: manipulatives - composing shapes 00:51:00 Linda Koval: Comparing relationships between the area is so important. 00:51:38 Justin Klinger: Draw a shape and write dimensions that will give you

a specific area. 00:51:59 Linda Koval: Students need to be able figure out the missing part. Given the area and one of its sides, find the missing side. It is very important when the area is a triangle. This definition of understanding can be immediately 00:53:56 Aya Zvaigzne: applicable. Linda Koval: Agreed, Ethan! It would've been faster and easier. 00:54:03 Cindy Bryant: "There is no decision a teacher makes that has a 00:55:32 greater impact on students' opportunities to learn and on their perceptions about what mathematics is than the selection or creation of the tasks with which they engage students in studying mathematics (Lappan and Briars, 1995)." 00:55:41 Aya Zvaigzne: UbD Michael Welch: 00:55:52 how to do that in a school where I am the only math teacher? Chonda Long: 00:56:02 https://www.nctm.org/PtA/ Understanding by Design (UdB) 00:56:11 Aya Zvaigzne: 00:56:55 Ethan Weker: @Michael - reach out to other small schools? Or through social media (Twitter, etc.) - I'm in a dept of 3 and have found it incredibly helpful. 00:57:42 Aya Zvaigzne: @Michael Welch I am sorry you have no immediate colleagues, but I hope you can find some in your district that are open to developing communication and sharing resources. kindest regards to you. If that is not working (I have been in isolation before) is to trawl the nets. 00:58:29 We've come a loooong way... Cindy Bryant: 01:00:09 Trena Wilkerson: Michael-Consider reaching out on MyNCTM. There are great people there to build community with around this area. 01:00:10 Chonda Long: https://www.nctm.org/Store/Products/Taking-Action--Implementing-Effective-Mathematic s-Teaching-Practices-in-Grades-9-12/ 01:00:40 Carol Matsumoto: Yay Melissa! 01:00:56 Student thinking mean that I have given them the Aya Zvaigzne: vocabulary that they use and understand to communicate with me. This is challenging in a virtual environment when very many of my students are wida 1 or wida 2. It is possible but challenging. It was so much easier and actually successful in person, in live teaching in the classroom. Michael Welch: Thanks for the suggestions! 01:01:23 very commendable 01:01:39 Rogelio Lapulapu: 01:01:45 Aya Zvaigzne: The graphing stories task is one of my favorites. 01:02:00 Ruby Maghirang: d is exponential decay 01:02:09 Aya Zvaigzne: It promotes great discussion (or it did when we were all together). Alex Freuman: 01:03:07 I'd ask her to take over the teaching! Rachell Scott: Explain her thinking 01:03:34 Comlavi Djondo: A: How many candle burn in zero hour? 01:03:44 Cary Mallon: what are the other step functions besides mail and 01:04:35 taxes 01:05:27 W Gary Martin: Nice examples of student work! Michael Chrzan: @Cary bank accounts with interest gained 01:06:04 01:06:06 William Driscoll: great examples of problems and kids'

responses @cary malton I think I remember some other examples 01:06:16 Ava Zvaigzne: on either Mars or one of the other big websites for people selling produce (watermelons or such). You had to see and take deliveries. The students had to make that into a graph. 01:06:45 Cary Mallon: thanks ROSALIE MACASPAC: Thanks this is so interesting 01:07:25 Prior learning is one of the biggest challenges for 01:07:35 Aya Zvaigzne: our math students. mind set first... 01:08:03 Rogelio Lapulapu: 01:08:16 Aya Zvaigzne: It requires a lot of time for scaffolding and in a virtual environment (asynchronous). supports provided Jorge Veloso: I'm loving today's session, refreshing a lot of 01:10:11 concepts... 01:10:37 Rachell Scott: Especially real concepts. plus one @Jorge ... this session is a platinum 01:10:47 Aya Zvaigzne: standard Many or most of our students are refusing to 01:12:20 Aya Zvaigzne: actually take the tests. Ethan Weker: I was in a charter school years ago where we had 01:12:30 mandated test prep all year long. I lasted one year. 01:12:36 Cherish Alberts: This has really made me think about making changes to how I assess. Thank you so much! 01:13:06 Aya Zvaigzne: They bubble in Christmas trees and hit the buttons in 60 seconds. They are refusing the tests. 01:14:08 Aya Zvaigzne: I do my best to assess my students on an ongoing basis. The standardized ones they are required are not very useful if my students refuse to participate. 01:14:21 Cherish Alberts: Yay! Great resources! 01:14:34 Linda Koval: Now that we are going virtually, I am thinking assessing differently. One of the reasons is to deter students from cheating, but I think now it may be a good thing to do performance assessment. 01:15:08 Aya Zvaigzne: The goals and focus of assessments in this seminar are golden information. Trena Wilkerson: So many great ideas and resources for 01:16:30 assessment. Thank you Diane for reminding us of the importance of assessmsent! This goes well with several of the sessions from the NCTM 100 days of Professional Learning that offer additional examples and considerations for assessment. Thank you again Diane! I loved the historical background as well. 01:17:01 Carv Mallon: Evaluate what you value! Yvonne Holloman: 01:17:24 Thank you for sharing the great resources! Kathleen Kustura: 01:17:31 thank you 01:17:33 Ava Zvaigzne: Brilliant seminar. 01:17:35 Winnica McLean: Thank you so much 01:17:36 lee hanby: thank you 01:17:36 Elizabeth Sawyer: Thank you! 01:17:36 Barbara Post: Thank yui 01:17:37 Gloria Flores: Thank you Promote and not undermine high levels of mathematics 01:17:37 Cindy Bryant: learning by each and every student. Great presentation Diane! Thank you!

01:17:42 Linda Koval: Thank you so much, Miss Diane! 01:17:43 Georgina Coffin: Thank you!! 01:17:43 Angelina Gutierrez: Thank you SO much!! 01:17:46 Tami Nelson: thank you 01:17:46 Ethan Weker: Thanks so much! 01:17:48 Melonie Smith: Thank you Really great presentation 01:17:49 Michael Welch: Justin Klinger: Thank you. Very helpful 01:17:49 NITIN MALVIYA: thank you Ma'am 01:17:51 Patricia Dominguez: Thank you for such a great webinar 01:17:52 01:17:53 Andréa Chew: Thank you so much! 01:17:53 Cary Mallon: thanks Kathleen Morris: Thank you, Diane! It's always a pleasure to 01:17:53 hear from you!! 01:17:55 aurora gonzales: thank you yo so much 01:17:55 Tanya Landry: Thank you! 01:17:55 Tameillia Cain: Thank you! Sharon Black-MacKinnon: Thank you for all the reminders! Very 01:17:57 inspiring. Rachell Scott: Thank you so much for your wonderful information. 01:17:58 01:17:59 Carol Matsumoto: Thanks Diane! 01:18:00 Deborah Alexander: thank vou Peter Waswil: 01:18:01 Thank you! 01:18:05 Jet Yeung: Thank you for information on assessment. 01:18:06 Lisa Aldous: Thank you! 01:18:08 Mary France Imperial: Thank you so much. Another great session! 01:18:08 Stephenia Courtney: TY! W Gary Martin: Very thorough discussion of issues in assessment, 01:18:10 very thought provoking! Linda Koval: Thank you NCTM for another wonderful webinar! 01:18:11 Monica Weese: Thank you. 01:18:12 Rachell Scott: Thank you!! 01:18:16 Rogelio Lapulapu: Great presentation ! Thanks a lot Diane. 01:18:18 01:18:24 Rita Shamrock: Thank you for all the good ideas Betty Stallings: Great Webinar 01:18:34 01:18:48 Donna Misciagna: Thank you! Alex Freuman: This was a truly helpful presentation. Thanks for 01:18:55 sharing this. 01:18:57 Chonda Long: https://www.nctm.org/PtA/ 01:19:11 Chonda Long: https://www.nctm.org/Store/Products/Taking-Action--Implementing-Effective-Mathematic s-Teaching-Practices-in-K-Grade-5/ 01:19:11 Honey Sacro Swem: Thank you, Diane, for shedding light on what, why, and how of purposeful assessments. Mary Lynn Raith: Great presentation! 01:19:16 01:19:19 Jennifer Toler: Thank you so much! This was very helpful! 01:19:24 Chonda Long: https://www.nctm.org/Store/Products/Taking-Action--Implementing-Effective-Mathematic s-Teaching-Practices-in-Grades-6-8/ 01:19:26 Wisnu Siwi Satiti: Thak you so much Diane! Great presentation!

Many great resources, and useful way in order to conduct efffective assessment. Thank you! 01:19:30 Trena Wilkerson: Love Taking action series! Rachell Scott: Very informative presentation. 01:19:42 Chonda Long: 01:19:46 https://www.nctm.org/Store/Products/A-Fresh-Look-at-Formative-Assessment-in-Mathemat ics-Teaching/ 01:19:55 Daniel Irving: Thank you for this incredibly informative presentation! 01:20:00 Chonda Long: https://www.nctm.org/Store/Products/The-Formative-Five--Everyday-Assessment-Techniqu es-for-Every-Math-Classroom,-Grades-K-8/ 01:20:30 Chonda Long: https://www.nctm.org/virtual2020/ 01:20:33 More great resources to support assessment Trena Wilkerson: at www.nctm.org/backtoschool too! 01:20:54 Wisnu Siwi Satiti: Thank you everyone! Thank you very informative 01:21:36 Cheryl Ann Doyle E Barran: 01:21:43 MIKE GENUEL SALAZAR: Thank you 01:21:45 Delphine Stallworth: Thank you Great Job