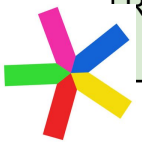
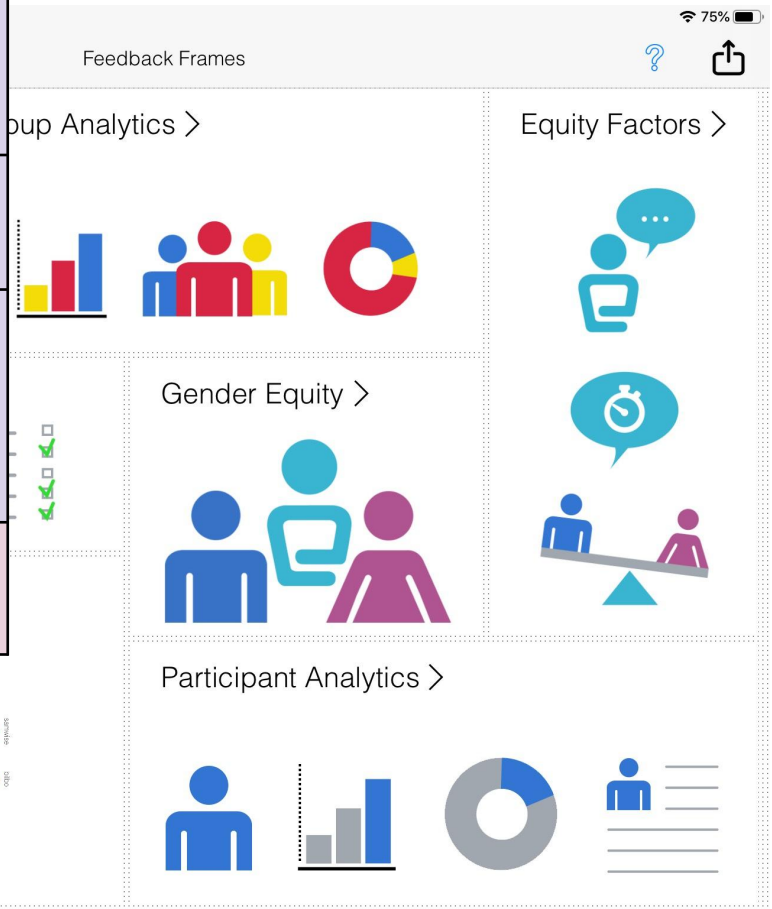
by:
Jessica
Schroeder

Key Components	
What is it?	An app for tracking participation in group discussions
Why and When to use it	Whenever a group discussion is taking place - “entire class talk” - and to give the group and teacher immediate feedback on the level of participation. It is for any branch of knowledge for expert advancement or as an exploration instrument (ELA, Math, Science, Leadership, etc.).
Developer and Publication	Dave Nelson (Founder) & George Sachpatzidis (Software Engineer) Released May 24, 2016
Hardware Requirements	Requires iOS 9.3 or later - compatible with iPad only
Age Level	4+
Pricing	$1.99 for standard version, $9.99 for premium version
Where to get it	App Store https://www.apple.com/ios/app-store/
Potential difficulties	iPad only - not compatible with other Apple products, nor Windows or Android products. No account required means data is stored locally on device. Learning curve to learn ideal implementation.
Recognitions	American Association for School Librarians (AASL) Best Apps for Teaching and Learning (2019)



Key Features	Learning theories w/which Equity Maps connects
Chart & record the interaction of students or colleagues to measure and graphically illustrate levels and types of participation.	Radical Constructivism - shifts control from instructor to learner “open ended learning”
Obtain instant analytics, data sets, & animated playback.	Moderate Constructivism - learners as partners
Trace and assess your students' interaction, performance, & involvement, promoting wider collaboration, engaging students, and nurturing reflection (metacognition).	Social Constructivism - integrating theories from epistemology, learning, sociology, anthropology, and education
Equity maps can be integrated into the embedded assessment portion of your curriculum design.	



Evidence?

Evidence
Sharma, P. (2019). Observational Instrument for Associate Teacher Analysis into Pupils' Involvement in Classroom Dialogue Based on Research: T-SEDA. 5(4). IJARIIE-ISSN(O)-2395-4396. Retrived from https://pdfs.semanticscholar.org/8330/e7c445f362b560973c522792d56ed210eb3f.pdf
This article compared two observation methods to help increase teacher awareness of student participation in productive classroom dialogue. A 'simulated live' approach using video recordings and a 'follow-up analysis' approach using audio recordings and transcripts were both used. Findings suggest "using either technique regularly can aid teachers in noticing classroom events and adjusting teaching accordingly."

P-I-C-R-A-T!!!

Students' Relationship to Equity Maps Is:				
C	Creative	CR	CA	CT
I	Interactive	IR	IA	IT
P	Passive	PR	PA	PT
Teacher's Use of Equity Maps _____ Traditional Practice				
		Replaces	Amplifies	Transforms
		R	A	T

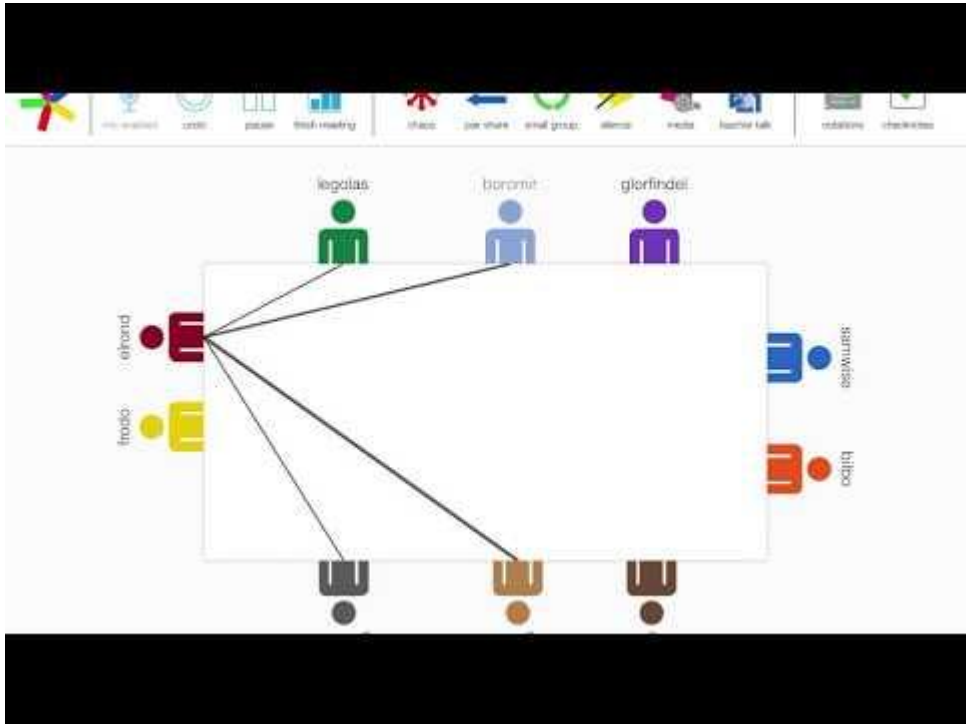
PICRAT Framework Integration	
PR	Students passively view analytics as teacher replaces a pen and paper dialogue web with Equity Maps
PA	Students passively view analytics as teacher amplifies the contributions of the group with the data collected with Equity Maps
PT	Students passively view analytics as the teacher transforms the data into action points for improvement using the "Feedback Frames" compiled through the mapping process
IA	Students interactively view analytics - encouraging metacognition about potential adjustments
IT	Students interactively view analytics - make adjustments to their behavior as a result of reflective thinking

Premium Version ($9.99) Includes:

40 participants per group (instead of 20 w/standard)
Checknotes to track student contribution type
Access expanded data in feedback frames
Export data to a CSV file to track over time using Excel or Numbers

Creating a Group

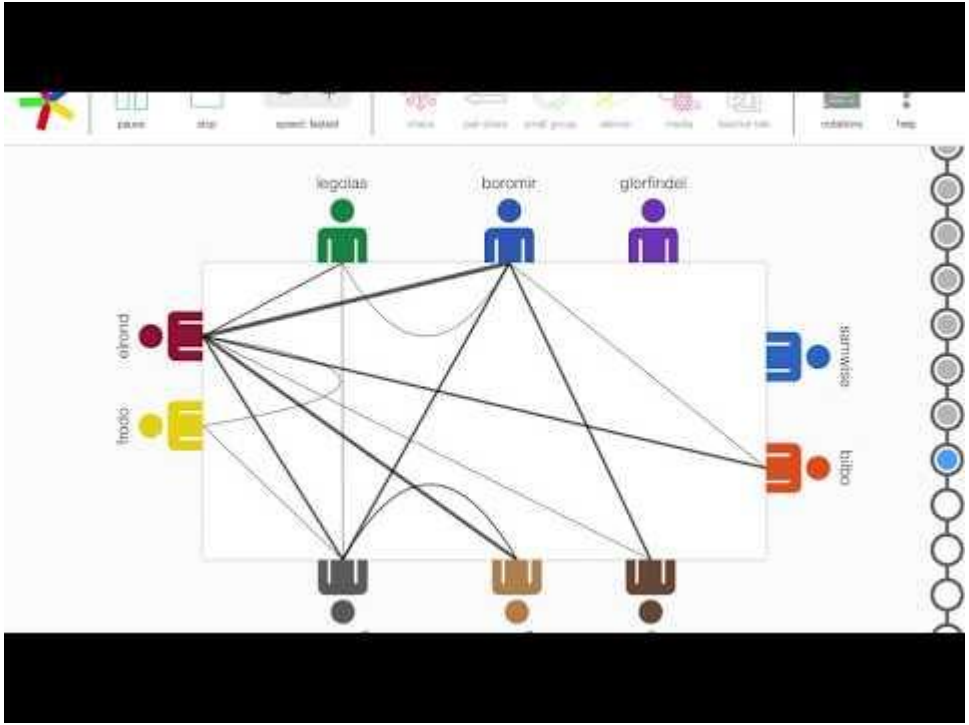
Mapping a Group

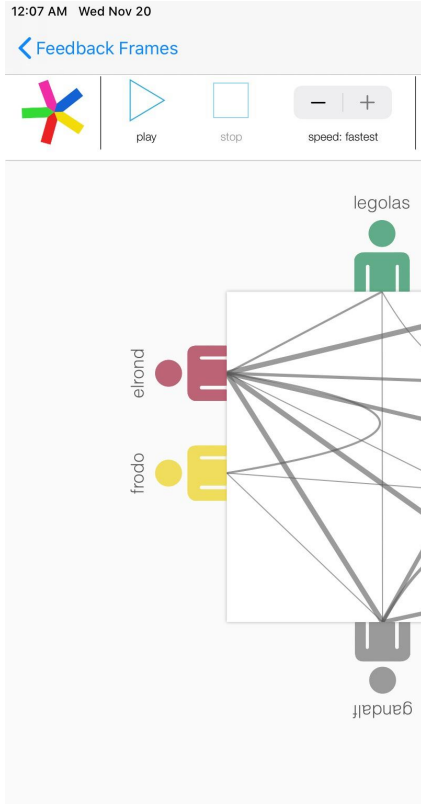


Checknotes & Notations

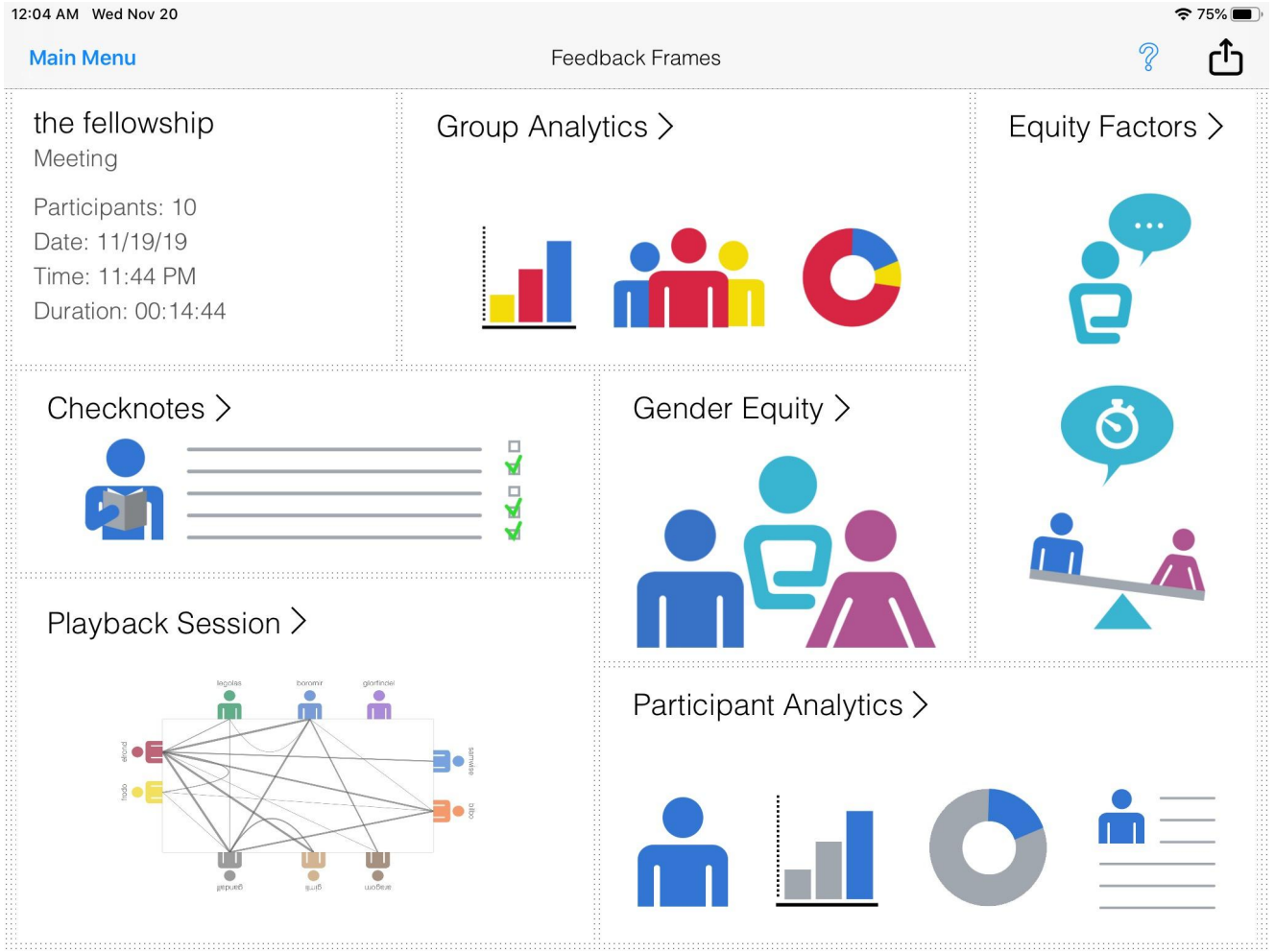
Checknotes	Notations
Track student contribution type	Make free form notes for each participant
Choose from preselected options or make your own	No preselected options

Viewing the Playback

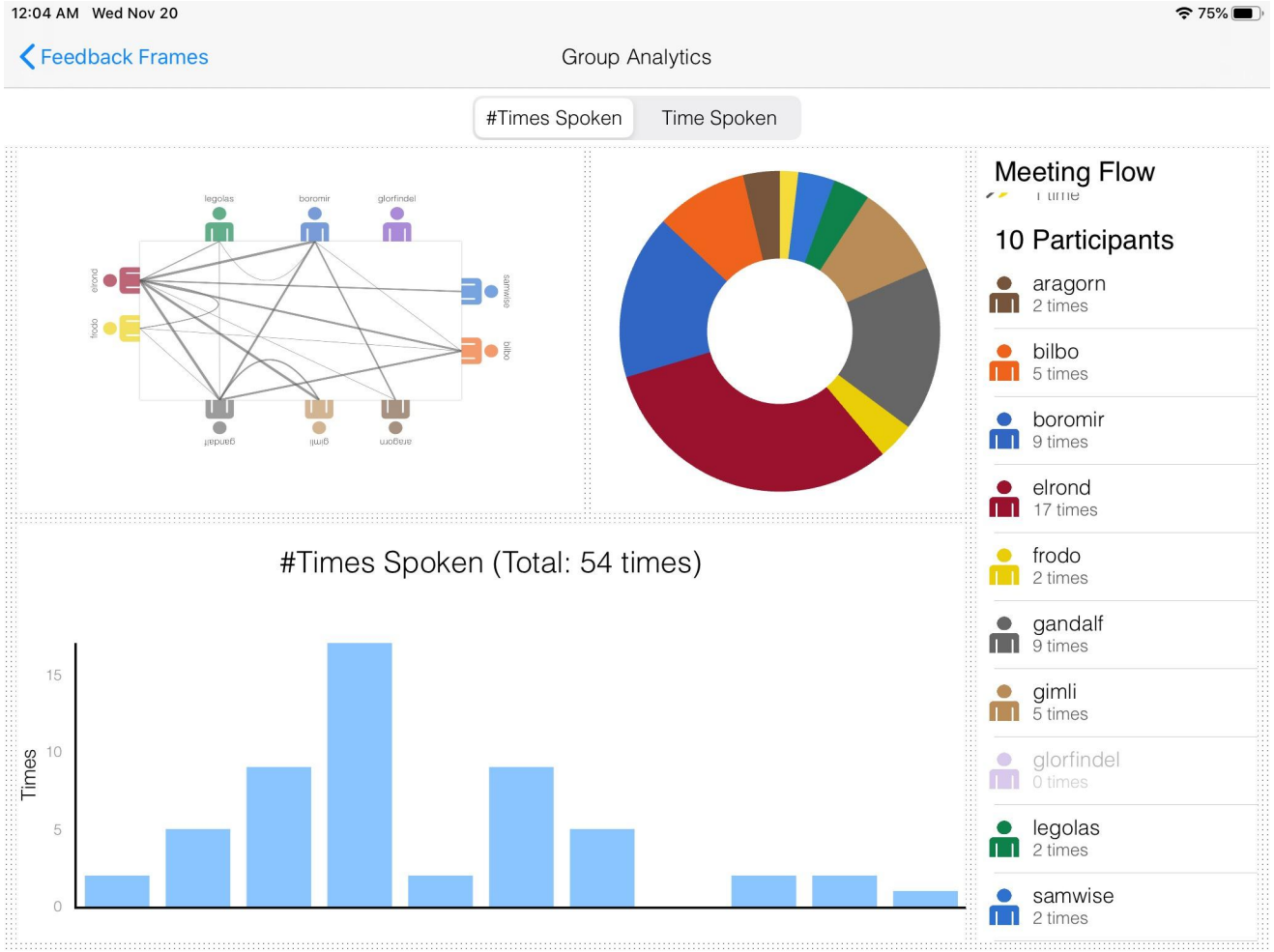




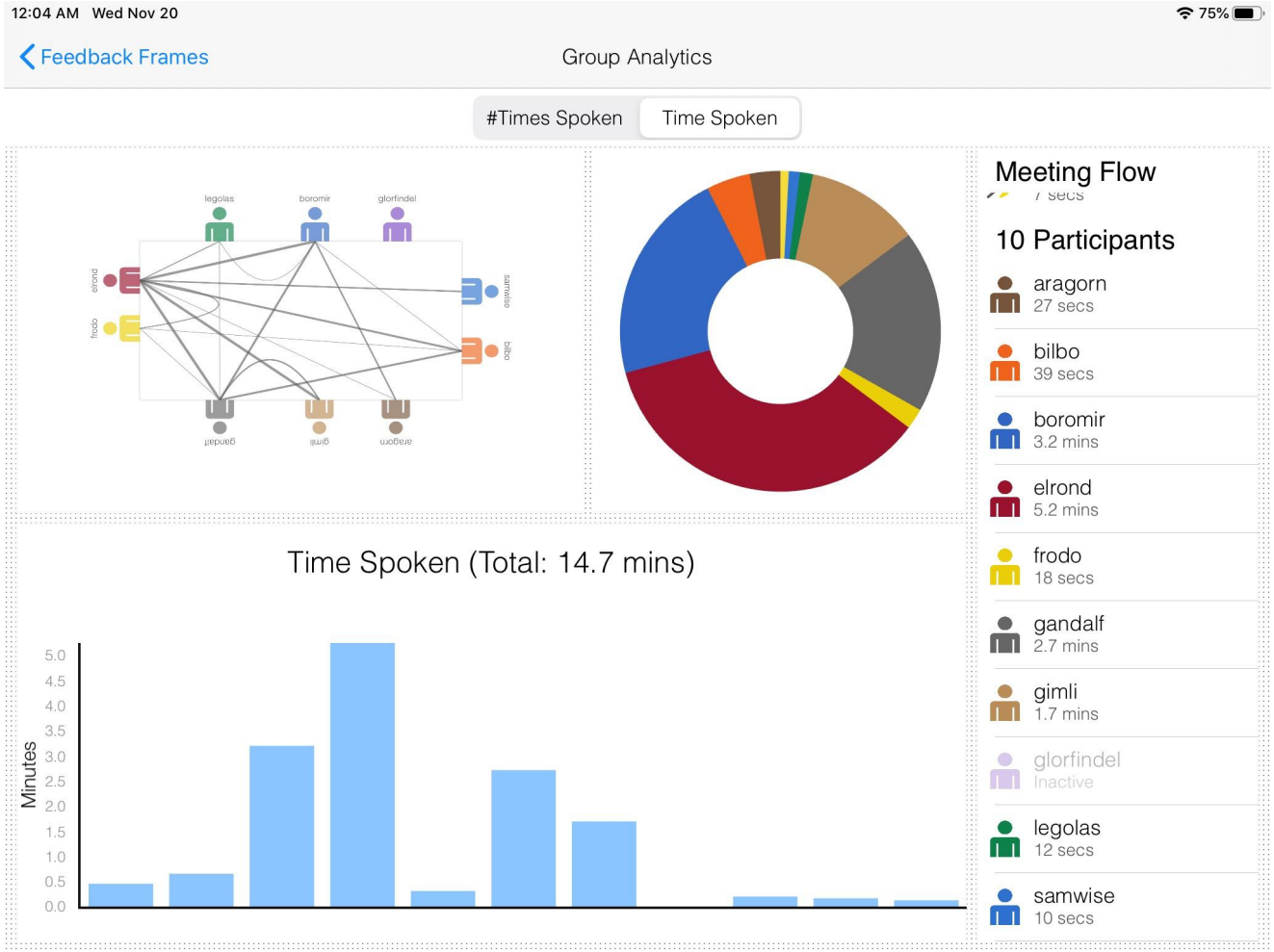
Understanding The Feedback Frames



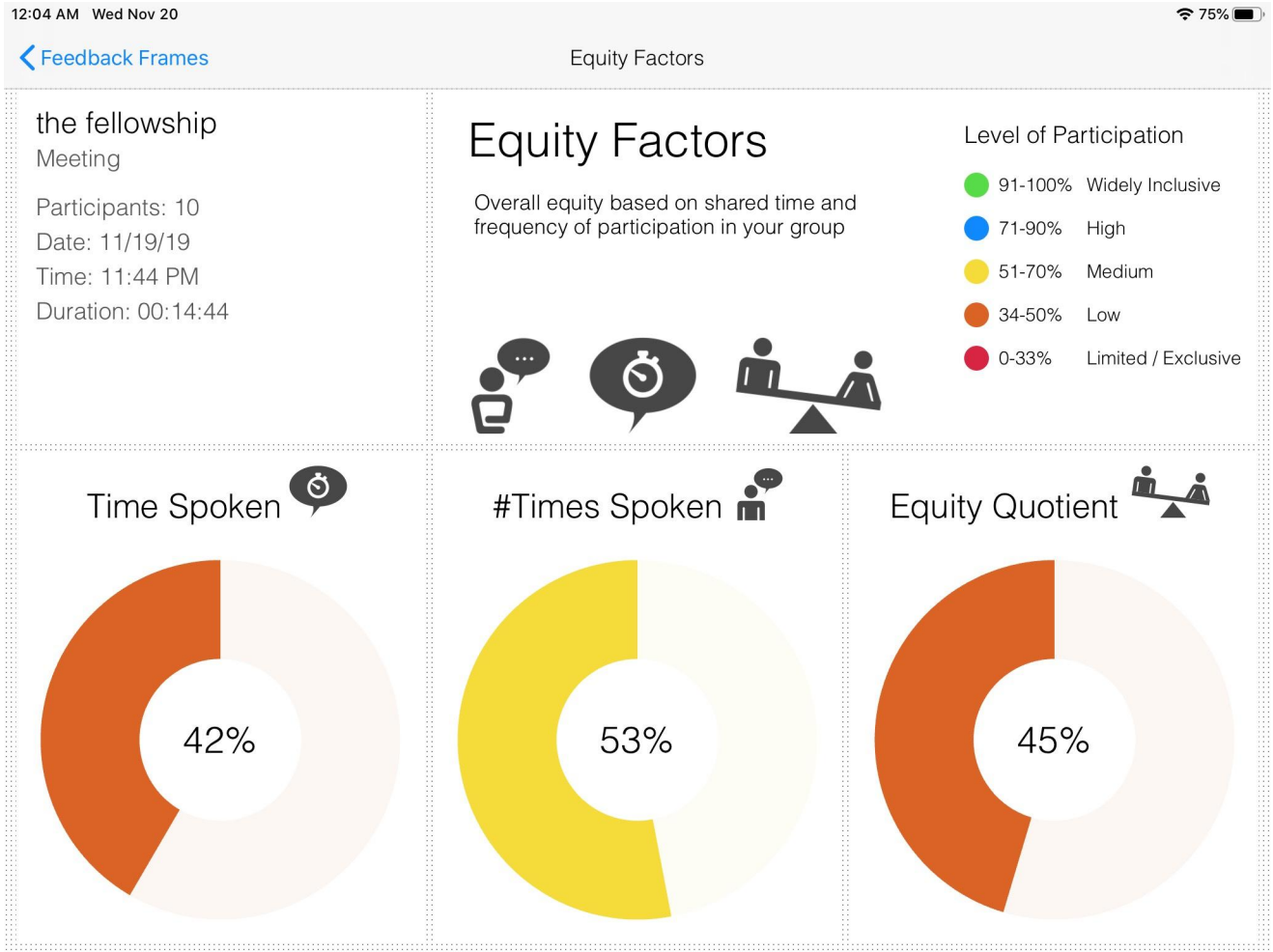
Group Analytics



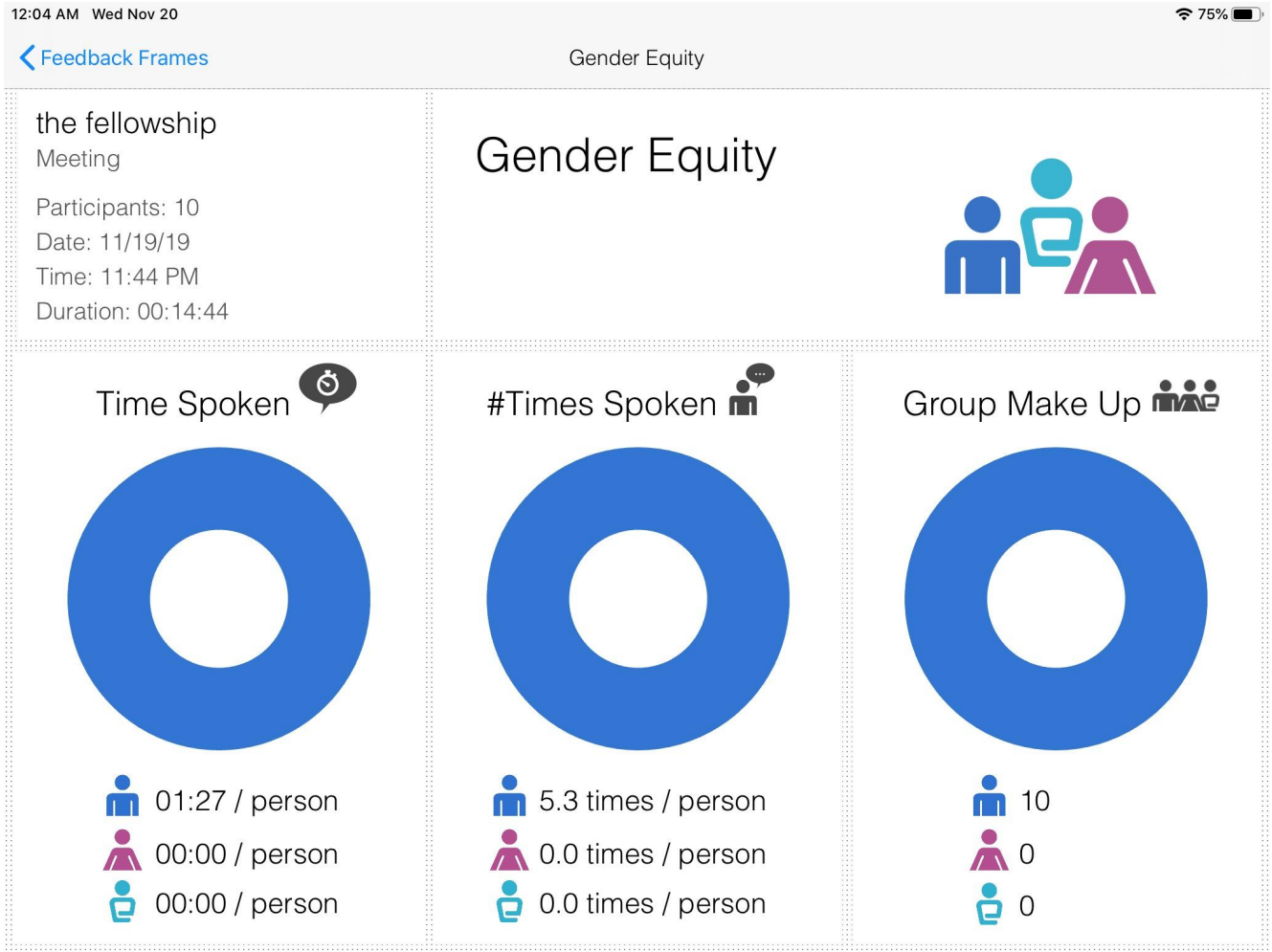
Group Analytics



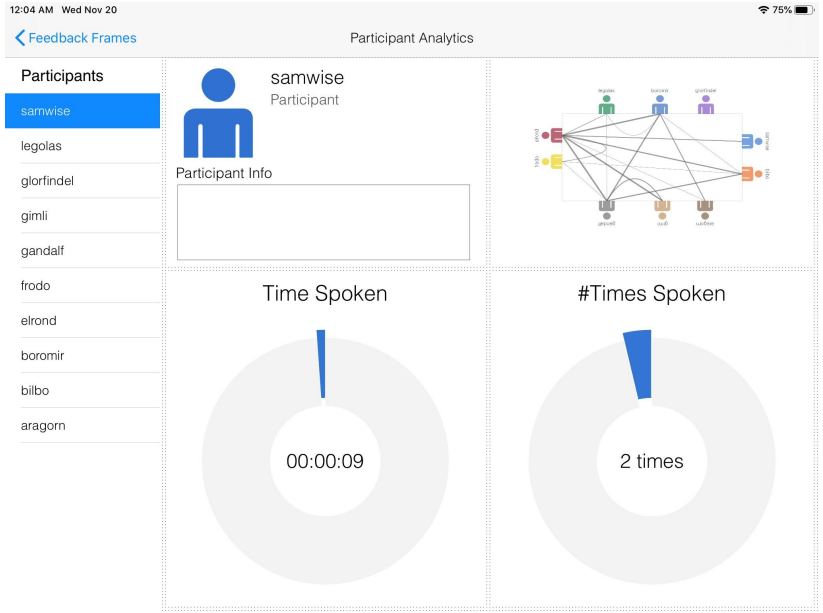
Equity Factors

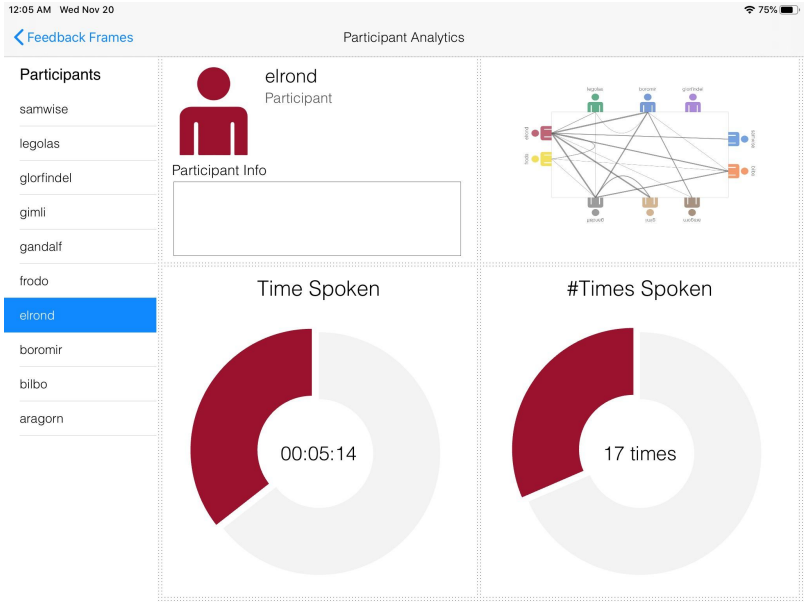


Gender Equity

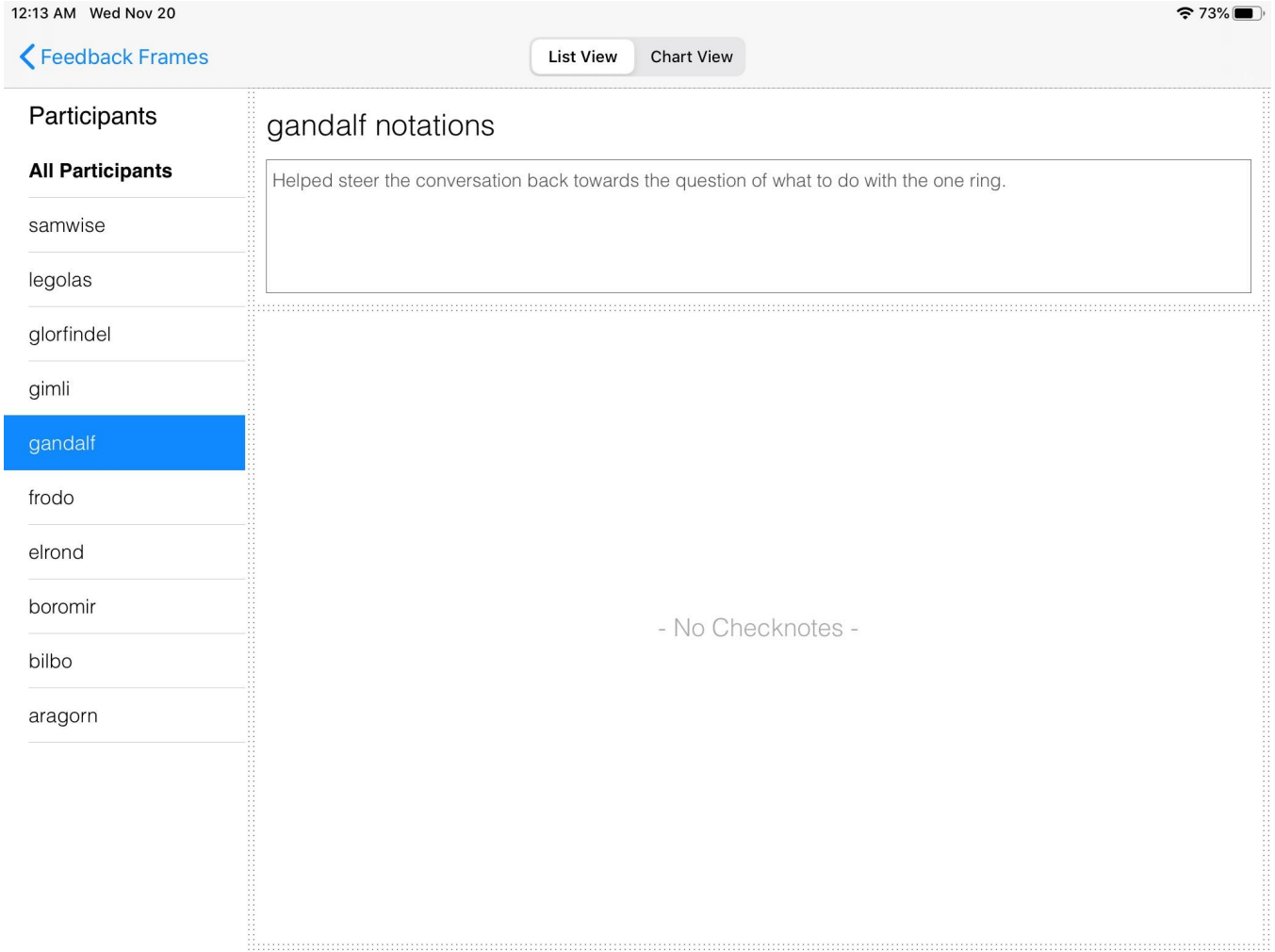


Participant Analytics

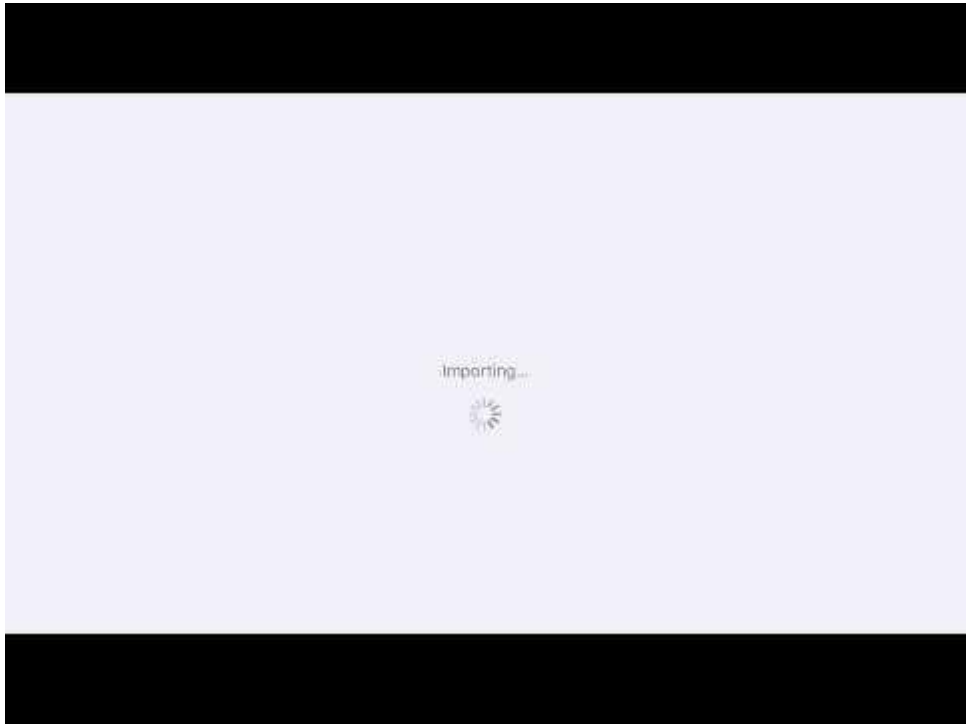




Notations


12:13 AM Wed Nov 20
73%
Feedback Frames
List View
Chart View
Participants
All Participants
samwise
legolas
glorfindel
gimli
gandalf
frodo
elrond
boromir
bilbo
aragorn
gandalf notations
Helped steer the conversation back towards the question of what to do with the one ring.
- No Checknotes -

Exporting to a Spreadsheet



Group Name	the fellowship
Setting	Meeting
# of Participants	10
Date	11/19/19
Time	11:44 PM
Duration	0:14:44

	Equity Quotient	# Times Spoken	Time Spoken
Equity Factors %	45%	53%	42%

	# Males	# Females	# Non-binary	Male Time Spoken / Person	Male # Times Spoken / Person
Gender Equity	10	0	0	1:27	5.3

Participant Name	Time Spoken (Mins)	# of Times Spoken	Participant Info
samwise	0:00:09	2	Snuck into the secret meeting.
legolas	0:00:11	2	Came to tell that Gollum has escaped but it was already known to the council.
glorfindel	0:00:00	0	Stayed silent.
gimli	0:01:41	5	Came for advice on a response to a messenger from Sauron.
gandalf	0:02:42	9	Helped steer the conversation back towards the question of what to do with the one ring.
frodo	0:00:18	2	Volunteered to take the ring to Mt. Doom though he does not know the way.
elrond	0:05:14	17	Facilitated the discussion telling the story of the making of the ring.
boromir	0:03:11	9	The protector of Gondor seems to want to use the rings power for “good” and doesn’t see why it need be destroyed.
bilbo	0:00:39	5	Secretly craves the ring back in his possession and volunteers to “take it” to Mt. Doom.
aragorn	0:00:27	2	Shows the sword that was broken and reveals himself as the heir of the throne in Gondor.

Questions?

https://equitymaps.com/

Equity Maps Professional Development Lesson Plan Module

Jessica Leigh Schroeder

University of Delaware

EDUC638

Fall 2019

Curriculum Area	Professional Development	**Time Frame**	60 minutes
Developed By	Jessica Leigh Schroeder	**Grade Level**	6th-12th grade

Identify Desired Results

Content Standards

ISTE-C standards (2011)

2. Teaching, Learning and Assessments
Technology coaches assist teachers in using technology effectively for assessing student learning, differentiating instruction, and providing rigorous, relevant and engaging
learning experiences for all students.
a. Coach teachers in and model design and implementation of technology-enhanced learning experiences addressing content standards and student technology standards.
f. Coach teachers in and model incorporation of research-based best practices in instructional design when planning technology-enhanced learning experiences.

3. Digital Age Learning Environments
Technology coaches create and support effective digital age learning environments to maximize the learning of all students.
a. Model effective classroom management and collaborative learning strategies to maximize teacher and student use of digital tools and resources and access to technology-rich learning environments.

4. Professional Development and Program Evaluation Technology coaches conduct needs assessments, develop technology-related professional learning programs, and evaluate the impact on instructional practice and student learning.
b. Design, develop and implement technology-rich professional learning programs that model principles of adult learning and promote digital age best practices in teaching, learning and assessment.

Prior Knowledge Required	None, although navigation of iPad knowledge helpful

<table>
<tr><th colspan="2">Understandings</th><th colspan="2">Essential Questions</th></tr>
<tr><th colspan="2">Overarching Understanding</th><th>Overarching</th><th>Topical</th></tr>
<tr><td colspan="2">The explanation of Equity Maps

How to navigate Equity Maps

How the use of Equity Maps can motivate and engage students</td><td rowspan="3">How can we use Equity Maps to engage our students?

In what ways is the use of Equity Maps beneficial to my teaching?</td><td rowspan="3">What is Equity Maps?

What are some of the ways I could use Equity Maps in my classroom?

Can I learn new learning technologies?</td></tr>
<tr><th colspan="2">Related Misconceptions</th></tr>
<tr><td colspan="2">I don’t have time to learn about technology integration in my classroom.

I can’t use technology in my lessons.

I am too old to learn about technology tools.

I don’t understand technology tools.</td></tr>
<tr><th colspan="2">Knowledge
Students will know...</th><th colspan="2">Skills
Students will be able to...</th></tr>
<tr><td colspan="2">What is Equity Maps

What are some of the benefits of Equity Maps</td><td colspan="2">Navigate the Equity Maps app on an iPad

Use Equity Maps to create a group

Use Equity Maps to map a group discussion

View and interpret Equity Maps’ “Feedback Frames”

Export metadata to a spreadsheet for long term storage and tracking</td></tr>
</table>

	Incorporate the use of Equity maps into a lesson plan
Goal	After the module, teachers will be able to successfully use the Equity Maps app to map a group discussion. They will also be able to save, interpret and share the results.
Resources	iPad for each teacher SMART board to project Smart Bridgit Conferencing App for facilitator iPad (to project iPad onto SMART board using WIFI) $1.99 or $9.99 per teacher, dependent upon which version of Equity Maps they put on their iPad
Audience	Teachers and Administration
Situation	Administration and teachers are looking for new ways to encourage student engagement in group discussion.
Product/Performance	Under the guidance and instruction of the media specialist, teacher professionals will be responsible for mapping a sample group discussion and interpreting the results. Teacher professionals will create a lesson utilizing Equity Maps and share that lesson plan with their peers.

Technology Integration Framework

PICRAT

		Students' Relationship to Equity Maps Is:			
C	Creative	CR	CA	CT
I	Interactive	IR	IA	IT
P	Passive	PR	PA	PT
		Teacher's Use of Equity Maps _____ Traditional Practice		
		Replaces	Amplifies	Transforms
		R	A	T

PR: Students passively view data as teacher replaces a pen and paper dialogue web with Equity Maps

	PA: Students passively view data as teacher amplifies the contributions of the group with the data collected with Equity Maps, either displayed on a SMART board for the whole class to see or on a one-on-one conversation with each student to view their individual contribution data PT: Students passively view data as the teacher transforms the data into suggestions for engagement adjustments using the "feedback frames" compiled through the mapping process IA: Students interactively view data displayed by teacher, encouraging metacognition about potential adjustments and goal setting IT: Students interactively interpret data displayed and make adjustments to their level of group participation as a result
Standards	6 core principles of adult learning: 1) Adults need to know why they need to learn something before learning it. 2) The self-concept of adults is heavily dependent upon a move toward self-direction. 3) Prior experiences of the learner provide a rich resource for learning 4) Adults typically become ready to learn when they experience a need to cope with a life situation or perform a task. 5) Adults' orientation to learning is life-centered, and they see education as a process of developing increased competency levels to achieve their full potential. 6) The motivation for adult learners is internal rather than external. Andragogical process design: 1) Preparing learners for the program. 2) Establishing a climate conducive to learning.

	3) Involving learners in mutual planning. 4) Involving participants in diagnosing their learning needs. 5) Involving learners in forming their learning objectives. 6) Involving learners in designing learning plans. 7) Helping learners carry out their learning plans. 8) Involving learners in evaluating their learning outcomes.
Other Evidence	
Teachers will be able to conduct a group discussion in their class using Equity Maps. Teacher professionals will be able to share their technology integrated lesson plans with their peers.	

Learning Overview	
Outline	• Opening (10 minutes) (1, 3, 4, 5) (1, 2, 3, 4, 5, 6) • What is Equity Maps? Demonstration (20 minutes) (3, 4, 5, 6) (1, 2, 3, 4, 5, 6) • How can we use it in the classroom? (2 minutes) (6, 7) • Simulation (20 minutes) (4, 5, 6) • Questions (5 minutes) (7) (5, 6) • Closure & Assessment (3, 8) (3 minutes) Total Time: 60 minutes
Instructional Plan	• Opening (5 minutes):

	○ Teachers will come into the library and will log into their iPads. I will create a group in Equity Maps that mirrors the setup of the group. ○ Once they are all logged in, I will ask the opening questions (while tracking their responses on an Equity Map): ■ How many of you had ever had difficulty getting your students to verbally contribute to a group discussion? ■ Can you tell me some examples? ■ What are some of the reasons that students stay quiet? ■ If there was a learning strategy to help your students more fully participate in a group discussion, would you be interested in knowing about it? ● What is Equity Maps? (20 minutes) ○ Description of Equity Maps ■ Equity Maps is a digital tool that helps students and teachers to graphically view and evaluate group participation. ○ Reveal the discussion map that I took as the discussion in the opening took place by casting it to a SMART board. ○ What are the benefits? ■ Encourage metacognitive processes, empowering students to take ownership over their own learning ■ Increasing student collaboration and engagement ■ Lead to favorable learning outcomes ● Real time feedback ● Grades for participation ● Longitudinal challenge to improve the balance of participation over the school year/semester/unit ■ Data sets to track over time ○ How does Equity Maps work? Demonstration.

	■ I will demonstrate how to download Equity Maps from the App Store and engage with the app. ■ App Store & Installation (standard vs. premium version) ■ Navigation ■ Creating a group ■ Mapping a group ■ Interpreting the "feedback frames" ● Group Analytics ● Equity Factors ● Gender Equity ● Checknotes ● Participant Analysis ■ Playback Session ■ Export to spreadsheet ● How can we use it in the classroom? (2 minutes) ○ Group Discussions ○ Socratic Seminar ○ Math ○ Science ○ English Language Arts ○ Debate Club ○ Literature Circles ○ Leadership Groups ● Simulation (20 minutes) ○ Create a group called "The Council" from The Fellowship of the Ring (Write names on SMARTboard: Elrond, Frodo, Gandalf, Gimli, Aragorn, Bilbo, Samwise, Glorfindel, Boromir, Legolas)

	○ Map the group with a sample discussion: https://youtu.be/JSxo579azeI ○ Watch playback at double speed ○ Interpret “feedback frames” ● Open the floor for questions (5 minutes) ● Closure & Assessment (3 minutes) ○ Create a lesson plan utilizing Equity Maps and share that lesson plan with your PLC and the facilitator in the next two weeks.