Project Massive Open Online Professional Individualized Learning (MOOPIL)

Erin A. Singer, Ph.D., Evelina Guerrero, Kimberly Currens, Beverly J. Irby, Ed.D., Rafael Lara-Alecio Ph.D., Fuhui Tong, Ph.D.

Introduction

Project Massive Open Online Professional Informal Individual Learning (MOOPIL) is a five-year project working toward increasing the instructional capacity of teachers, administrators, parents, and paraprofessionals who serve English learners and economically disadvantaged students through the use of subsidized virtual professional development (VPD). Project MOOPIL is funded through both the National Professional Development Grant from the U.S. Department of Education, Office of English Language Acquisition and the Supportive Effective Educator Development (SEED) Fund.

Overarching Goals

The goal of MOOPIL is to prepare 2500 in-service teachers for making appropriate pedagogical decisions regarding the education of English Learner (EL) students over the five years of the grant and to offer 100 administrators, 100 paraprofessionals, and 100 parent/family members professional development for better understanding and implementation of instructional strategies for ELs at school or at home. This Virtual Professional Development (VPD) will be implemented through the creation of replicable MOOPIL modules built in collaboration with the Texas Center for Educator Excellence (TxCEE). This creates VPD curriculum that targets instructional improvement on high needs, campuses that serve ELs and in homes of ELs. The curriculum will be shared via a MOOPIL website and will be accessible nationwide through the Language Diversity Network. MOOPILS may be used with professional learning communities or by individual teachers for improving instruction.

What is a MOOPIL?

MOOPIL stands for Massive Open Online Professional Individualized Learning (MOOPIL) and is an online learning module containing specific objectives, instruction based on research, online discussion boards, reflection prompts, and assessments (Irby, 2015). MOOPILs provide approximately 30 minutes of instruction. Teachers, administrators, and paraprofessionals engage in MOOPILs via Canvas and earn .5 – 1 hour of continuing professional education credit per MOOPIL. Each MOOPIL begins with stated objectives. Participants then take a pre-test to assess existing knowledge. Delivery begins with a leading question which builds background and activates prior knowledge. There is then an engagement scenario, or lesson hook. What follows is applied research regarding the topic in question. Participants then engage in a discussion about what they are learning. Examples and/or non-examples are then provided. Participants are then asked to complete a reflection on their learning. Participants then take a post-test to assess knowledge gained.

Each MOOPIL module is built in collaboration with the Texas Center for Educator Excellence (TxCEE). The project provides participants with a convenient online portal (Canvas) to improve implementation of instructional strategies for English learners via online, work at your own pace modules, as well as live-recorded professional development seminars. Professional development certificates for MOOPIL units are provided by Texas A&M University as continuing professional development for participants' evaluation and improvement. The MOOPILs highlight a variety of evidence-based strategies and are useful in multiple learning environments, and makes them effective for a wide range of learners.

Virtual Professional Development (VPD) via MOOPILs

Project MOOPIL provides professional development (PD) for educators of ELs in a virtual format. According to researchers (Irby, et al, 2012) successful PD for teachers of ELs does the following:
1. Reflects best available research and practice related to teaching ELs
2. Facilitates teachers' development in subject-matter content, ESL/Bilingual teaching strategies, use of integrated technologies, and other essential elements in teaching standards aligned curriculum
3. Encourages teachers' improvement in practice through inquiry
4. Involves substantial on-going time commitment on the part of the teachers and the developers
5. Is assessed related to the impact on teacher effectiveness and ELs' learning, and this assessment guides subsequent professional development efforts. (p.)

Project Massive Open Online Professional Individual Learning (MOOPIL) has had effective implementation, with widespread participation of teachers, administrators, paraprofessionals, and families over the last three years. Participants are reporting positive learning outcomes and an appreciation for Project MOOPIL as being an accessible vehicle for increasing their instructional capacity for educating English learners at school or at home. Currently for year three (September 1, 2019-August 31, 2020), and as of April 30, 2020 we have recruited 577 teachers, 58 administrators, 36 paraprofessionals and 34 parents/guardians. These numbers continue to increase as the year progresses.
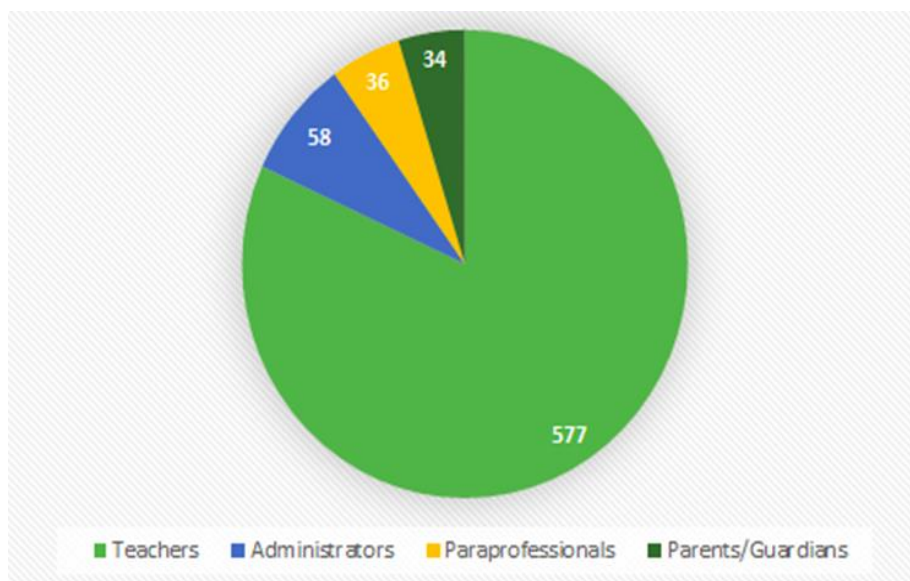

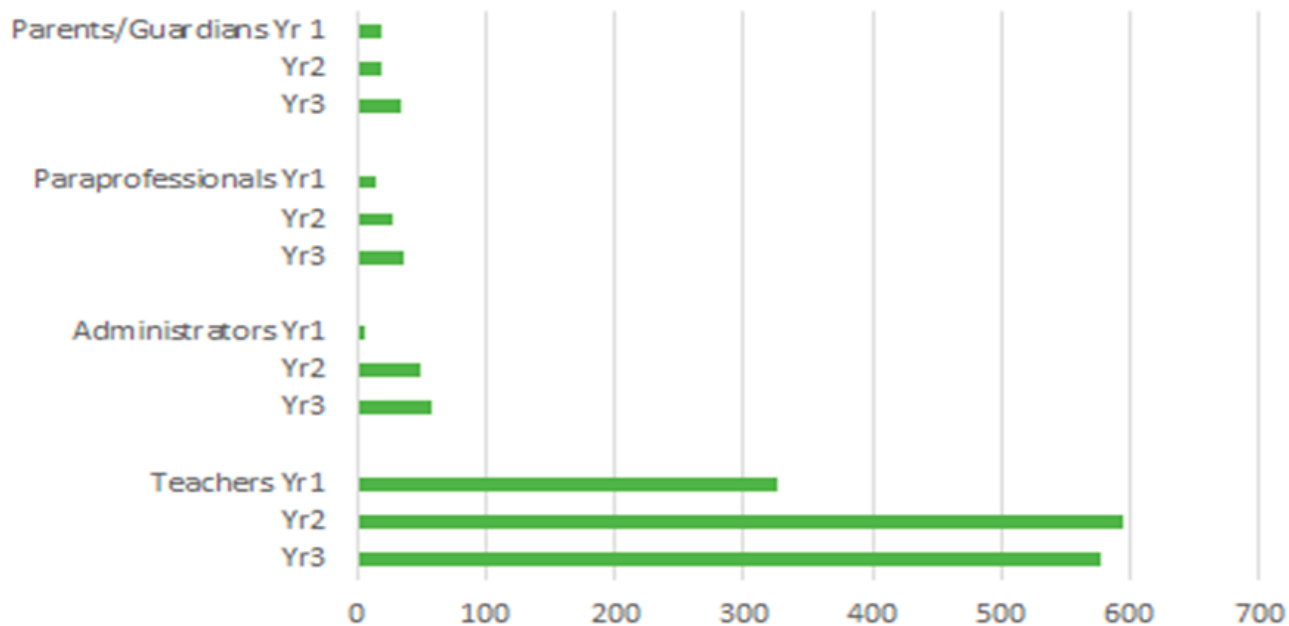*Figure 1*. Teachers recruited up to April 30, 2020

Figure 2. Project MOOPIL growth from Year 1 to Year 3-more teachers, admin, paras, and parents are being recruited

MOOPIL Development

Each MOOPIL is 30 minutes to one hour in length and includes pre- and post- content assessment tools. Teacher participants who are engaged in project research are required to take the number of MOOPILs that equal 16 hours of VPD; those teacher participants who complete a MOOPIL will receive a certificate for micro credentialing and will be considered a completer. Administrators and Paraprofessionals will each take the number of MOOPILs that total five hours of VPD and Parents/Community members will take the number of MOOPILs that total two hours. This year, the MOOPILs are offered from September 1, 2019 through August 31, 2020. Our newly edited MOOPILs went live on September 1, 2019. New MOOPILs were delivered in December 2019.

The following MOOPILs were developed in Year Three:

Reading
Fostering an Interest in Literacy
Literacy Centers
Developing Bi-Literacy
Structured Conversation, Reading and Writing Activities

Classroom Strategies
Levelled Questioning Strategies
Realia Strategies
Manipulatives Strategies
Cognate Strategies
Cues, Questions and Advance Organizers
Using Non-Linguistic Representation

Instructional Leadership
Phonics in the Bilingual Classroom
Assessing a Student's Phonics Knowledge
Role of Phonics in a Balanced Literacy Program
Stages of Spelling Development
Expanding Academic Vocabulary

The Four Language Domains
Strategies to Support Listening Development in ELs
Strategies to Support Writing Development in ELs
Strategies to Support Speaking Development in ELs
Strategies to Support Reading Development in ELs

The Inclusive, Culturally Competent Educator
Maximizing Opportunities to Benefit from Peer Models
Developing Balanced Bilinguals

Observation and Feedback
English Language Proficiency Standards (ELPS) Overview
Texas English Language Proficiency System (TELPAS) Overview
Evaluating Instruction from the perspective of Literacy Development
Understanding the EL Progress Measure
Conducting Comprehensive Needs Assessment
Teaching and Testing to Student-Preferred Learning Modes

Setting Objectives
Understanding Language Objectives in Relation to Learning Objectives
Student Learning Objectives

Family Engagement
Ensuring Equity and Positive School Environment
Effective Parent Engagement Strategies
Welcoming Newcomers

Family and Schools
Be Part of your Child's Academic Success
Sea Parte del Éxito Escolar de su Niño
Understanding Your Child's Scores
Entender las Marcas de su Niño

Baseline Assessment
As participants enroll in the learning management system, Canvas, they enter baseline data assessing years of experience, credentialing, demographic and community data. Interview and focus group questions targeted at teachers, paraprofessionals, administrators and family/community members have been developed and will be distributed near the end of project Year 3 (August, 2020). Assessments for mentor training efficacy and for the effectiveness of using the MOOPIL for a professional learning community (PLC) were developed and distributed for randomized controlled trial (RCT) participants.

Mentor Training
Three Texas A&M University Graduate Assistants in doctoral programs in the College of Education, were trained as mentors for the Virtual Mentoring and Coaching sessions that took place with Randomized Controlled Trial (RCT) Treatment participants. Training of these mentors consisted of the following: Reviewing the book *Coaching and Mentoring: A Handbook for Leadership Success* (Bevan, Capraro, Madson, and Irby Eds., 2019) and discussing different topics such as "Providing Meaningful Support", Mentoring and Coaching Relationship Basic Characteristics", and "Fostering Effective Mentoring". The group also participated in several coaching/mentoring activities that emphasized the importance of feedback, collaboration, and establishing goals.

Randomized Control Trial

There were 100 participants in the randomized control trial study of MOOPIL. Treatment and control teachers were disaggregated with the use of the randomization function of Excel. The fifty teachers assigned to the treatment group experience live VPD with a mentor while the fifty teachers in the control group experience asynchronous VPD without a mentor. The fifty teachers in the treatment group were divided into four sub-groups (n=12.5) and assigned one of the four mentors. Each group of twelve to thirteen treatment teachers were mentored weekly through live, synchronous discussions. The control group teachers received the same VPD by taking the same MOOPILs without synchronous mentor discussions.

Mentoring sessions occur weekly; participants meet online via Go-To-Meeting. Participants were asked to sign up to lead discussion of selected MOOPILs, The mentor affirms or corrects their statements and participants are invited to score the session via the survey below. Meetings are approximately one hour in length and two or three MOOPILs are addressed per meeting. **By engaging treatment teachers in leading discussions of selected MOOPILs, mentors enable them to have experiences similar to that of a professional learning community discussion group.**

The following MOOPILs are experienced by all teachers in the RCT:

Leadership for ELs

- Project MOOPIL: ELs in US Schools Part 1
- Project MOOPIL: ELs in US Schools Part 2

Cultural Responsiveness

- Project MOOPIL: Promoting Equal Status for Both Languages/Cultural and Linguistic Equity
- Project MOOPIL: Infusing Culturally and Linguistically Responsive Teaching
- Project MOOPIL: Dual Language Methodologies and Classroom Practice

The Classroom Environment for ELs

- Project MOOPIL: Interactive Activities
- Project MOOPIL: The Language Rich Classroom
- Project MOOPIL: Reducing Anxiety, Predictable Routines and Signals
- Project MOOPIL: Integrating Movement
- Project MOOPIL: Using Cooperative Groups
- Project MOOPIL: Scaffolding

Second Language Acquisition Foundations

- Project MOOPIL: Guidelines for Effective ESL Instruction
- Project MOOPIL: Fundamental Concepts of Second Language Acquisition
- Project MOOPIL: Stages of Second Language Acquisition
- Project MOOPIL: Increasing Comprehensible Input
- Project MOOPIL: The Role of the Affective Filter
- Project MOOPIL: The Transferable Nature of Language Proficiency
- Project MOOPIL: Developing Cognitive Academic Language Proficiency
- Project MOOPIL: Other Factors Affecting Second Language Acquisition

Observation and Feedback

- Project MOOPIL: Transitional Bilingual Observation Protocol - TBOP
- Project MOOPIL: Using Assessments and Data to Drive Instruction
- Project MOOPIL: Using Corrective Feedback: Do's and Don'ts
- Project MOOPIL: Facilitating Professional Learning Communities
- Project MOOPIL: Dual Language Rationale and Research Base
- Project MOOPIL: Benefits of Primary Language Instruction
- Project MOOPIL: Best Practices for Accelerating Language Acquisition

Reading

- Project MOOPIL: Promoting Phonemic Awareness, the Emergent Reader
- Project MOOPIL: Components of Literacy Development
- Project MOOPIL: How Children Develop as Readers and Writers
- Project MOOPIL: Developing Bi-Literacy
- Project MOOPIL: Language Experience Approach
- Project MOOPIL: Reading Fluency
- Project MOOPIL: Overview of the Four Literacy Domains

Knowledge Gains from MOOPILs for professional development Quantitative Analyses.

Sample quantitative analysis from RCT participants. Participants are still in progress. Participants who are lagging in their work are committed to completing this summer.

Table 1. Pre- and post-tests scores

MOOPIL Name	Quiz Type	N	Mean	SD
Second Language Acquisition Foundations: Fundamental Concepts of Second Language Acquisition	Pre	85	64%	1.033
	Post	76	90%	0.887
Second Language Acquisition Foundations: Stages of Second Language Development	Pre	69	47%	0.871
	Post	66	70%	0.789
Cultural and Linguistic Equity: Promoting Equal Status for Both Languages	Pre	83	78%	0.791
	Post	78	97%	0.452
Classroom Environment for ELs	Pre	130	67%	3.008
	Post	69	81%	5.071

MOOPILs are designed for users to self-pace through the content; hence the pre- and post-question and answer format does not demonstrate significant differences between the treatment and control groups' responses. Therefore, total group responses are illustrated here with the understanding that there are significant knowledge gains pre- and post MOOPIL usage. These assessments measure their pedagogical content knowledge. It should be noted here that the group with LVPD are engaged in discussions of how to apply the content to practice. This will be assessed through the video recordings of the teachers' instruction using the Transitional Bilingual

Observation Protocol (Lara-Alecio & Parker, 1994). The primary goal of the TBOP is to describe teacher and student interactions during the bilingual instructional process in transitional bilingual classrooms. With such information, teachers can self-monitor their practice. These observational data can also be used for preservice or in-service training, program evaluation, or field research.
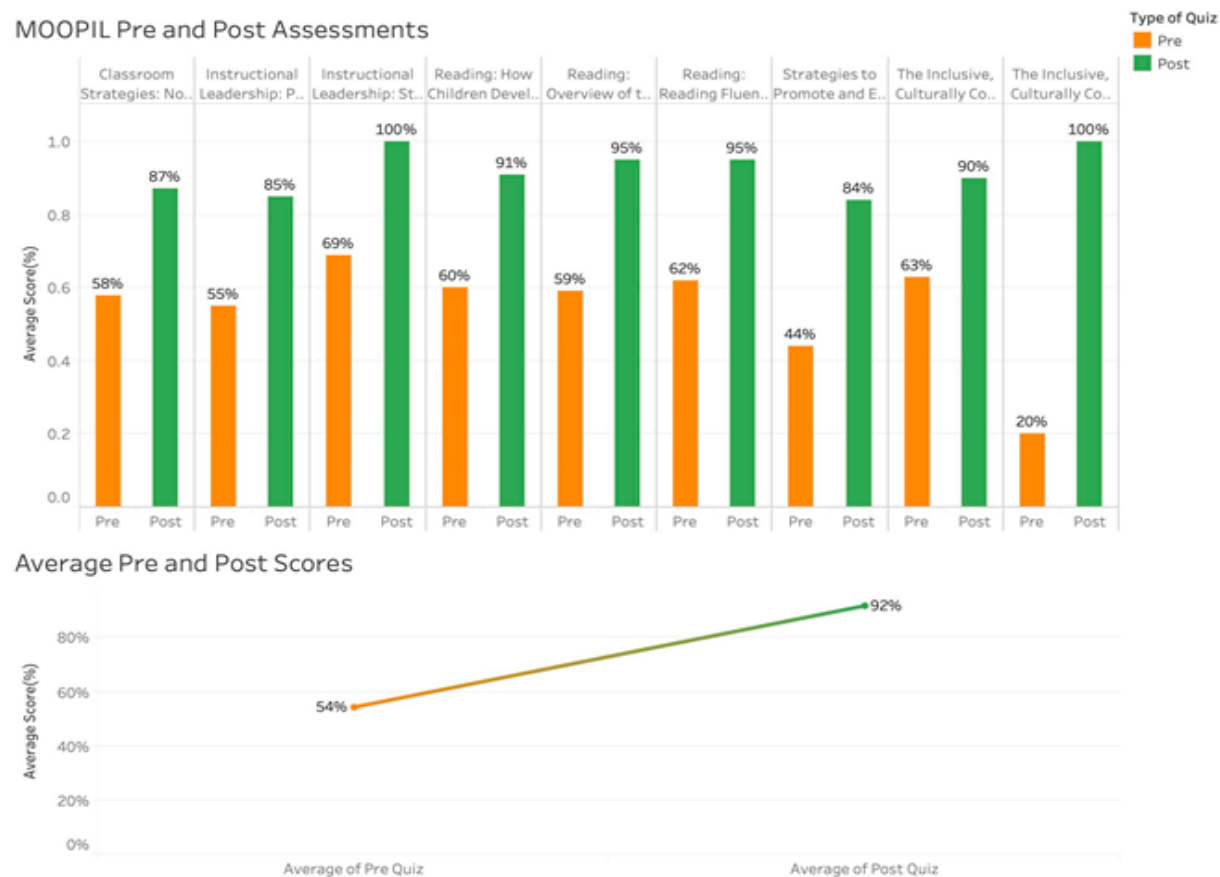

Figure 3.

MOOPIL Pre and Post Score Data

Professional development hours acquired by all four groups of participants in Year Three.

Teachers – 7,791

Paraprofessionals – 92
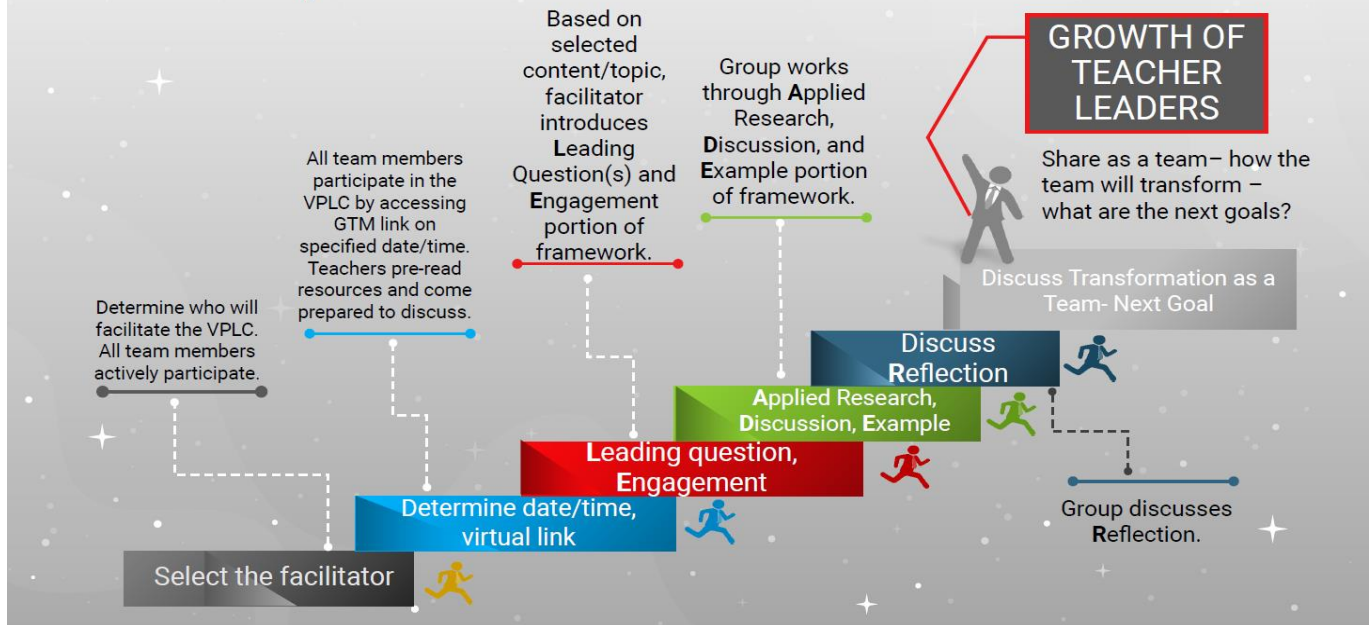
Administrators – 69

Families – 34

Figure 5. VPLC L.E.A.D.E.R. process (Irby, Lara-Alecio, Tong, 2017; Reprinted with permission)

The online community provided teachers with an avenue for collaborating and communicating with other teachers to share important research and resources to better serve their English Language Learner (ELL) students. The online PLCs allowed for innovation as the mentors facilitated discussion and environments where teachers worked together to share classroom experiences and difficulties. They also worked to determine creative and workable solutions with a focus on building instructional capacity in serving their students.

How did the practicing school leaders perceive the quality of the VMC through VPLC?

The quality of VMC was first evaluated on a three-point Likert scale, ranging from "1=strongly agree" to "3=strongly disagree". The participants were asked to evaluate four aspects of VMC using VPLC. As displayed in Table 1:
   a) 85% of participants were "very engaged" with the discussions with the mentor in the group.
   b) The majority of participants thought that VPLC discussions of application of MOOPILs in the classroom was "very detailed".
   c) The majority of participants believe that the mentor aided in guiding discussion "to a large extent".
   d) 85% of participants said that they were "very likely" to use MOOPILs in their own professional learning communities in the future.

Survey of participants' perceptions of MOOPIL mentoring sessions

1. How engaged were you in the discussions with the mentor in your group?
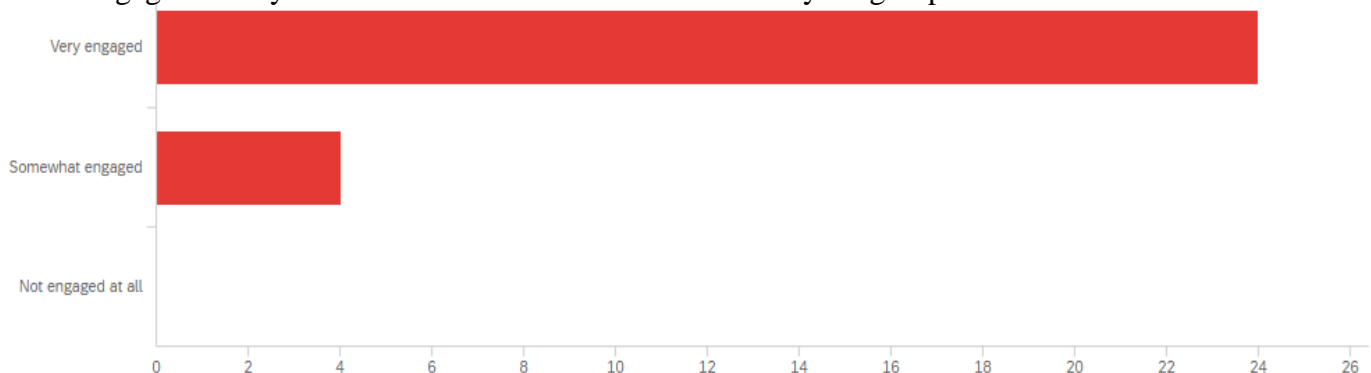
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How engaged were you in the discussions with the mentor in your group?	1.00	2.00	1.14	.35	.12	28

#	Answer	%	Count
1	Very engaged	85.71%	24
2	Somewhat engaged	14.29%	4
3	Not engaged at all	0%	0
	Total	100%	28*

* Not all treatment teachers have completed the survey

2. How detailed was the discussion of participants' application of MOOPILs in the classroom?
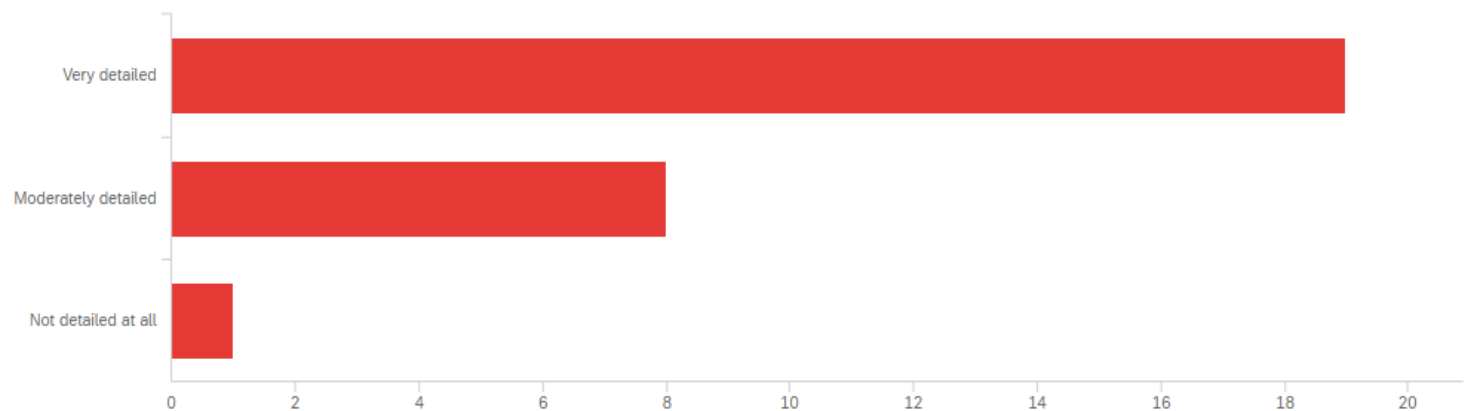
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How detailed was the discussion of participants application of MOOPILs in the classroom?	1.00	3.00	1.36	0.55	0.30	28

#	Answer	%	Count
1	Very detailed	67.86%	19
2	Moderately detailed	28.57%	8
3	Not detailed at all	3.57%	1
	Total	100%	28*

* Not all treatment teachers have completed the survey.

3. To what extent did the mentor aid in guiding the discussions?
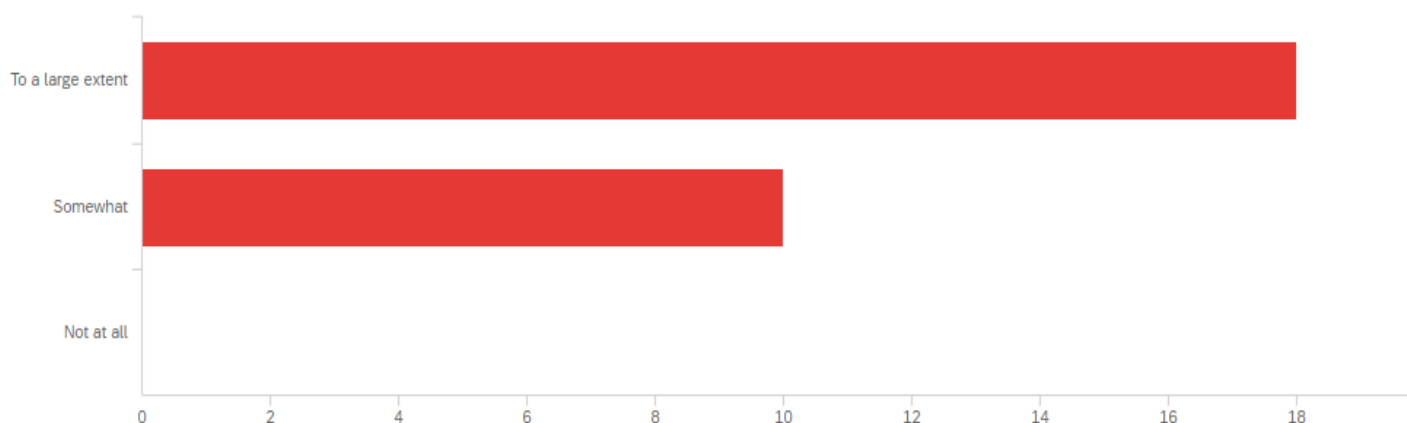
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	To what extent did the mentor aid in guiding the discussions?	1.00	2.00	1.36	0.48	0.23	28

#	Answer	%	Count
1	To a large extent	64.29%	18
2	Somewhat	35.71%	10
3	Not at all	0%	0
	Total	100%	28*

*Not all treatment teachers have completed the survey

4. How likely are you to use MOOPILs in your own professional learning communities in the future?
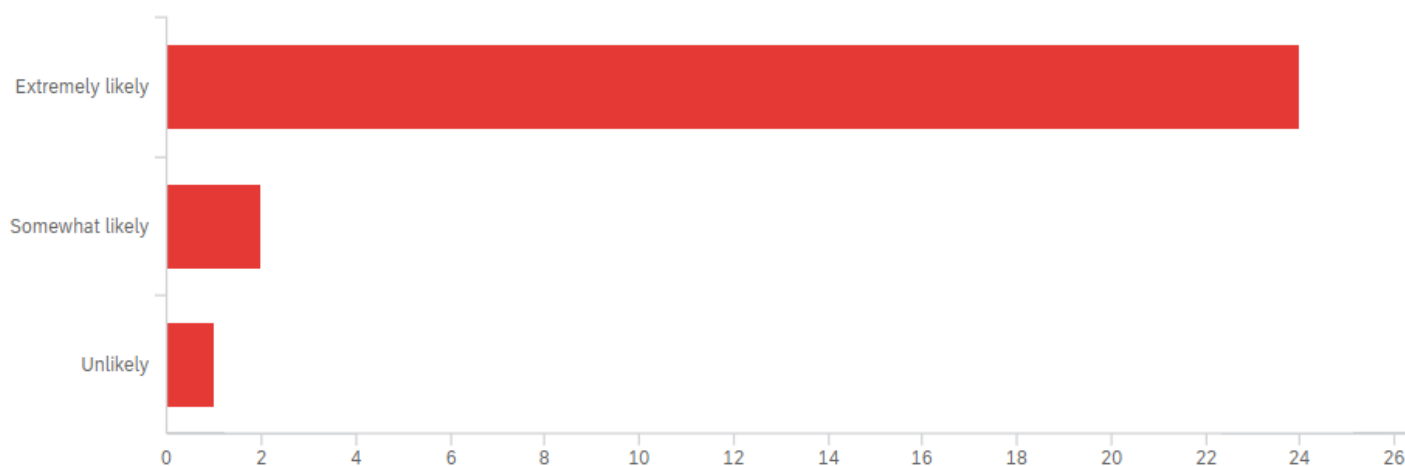
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How likely are you to use MOOPILs in your own professional learning communities in the future?	1.00	3.00	1.18	0.47	0.22	28

#	Answer	%	Count
1	Extremely likely	85.71%	24
2	Somewhat likely	10.71%	3
3	Unlikely	3.57%	1
	Total	100%	28*

* Not all treatment teachers have completed the survey

How did the participants transform their training to their practice?

Sample reflections on Second Language Acquisition Foundations from RCT participants.
Participants from both treatment and control groups provided pedagogically accurate responses to the following reflection question from the course *Stages of Second Language Acquisition, a MOOPIL in the unit Second Language Acquisition Foundations.*
Below are three sample responses from the treatment group.

Question: How might you adjust the linguistic demands of your communication with an English learner to align with her stage of language development without reducing the level of cognition? For example, what types of cognitively challenging questions would be appropriate for a student at the following stages: preproduction, early production, speech emergence, intermediate fluency, advanced fluency?

Responses from Treatment Teachers

Treatment Teacher 1: I might adjust the linguistic demands of my communication with an English learner to align with their stage of language development might supporting them with resources to respond without reducing the level of cognition. I could equip students with ways to respond such as asking a friend or using resources such as student journals. Types of cognitively challenging questions that would be appropriate for a student at the pre-production stage would be questions that response require a yes or no. Types of cognitively challenging questions that would be appropriate for a student at the early production stage would be questions that responses require one or two words. Types of cognitively challenging questions that would be appropriate for a student at the speech emergence would be questions that responses can be simple sentences. Types of cognitively challenging questions that would be appropriate for a student at the intermediate and advanced fluency would be design questions

Treatment Teacher 2: For example, what types of cognitively challenging questions would be appropriate for a student at the following stages:
Pre-production - questions that need visuals and students would need, for example, to be pointing to pictures to answer such questions. Questions like "Do you need to use the bathroom?" might require gestures or pointing to the bathroom icon etc.
Songs and poems or games might be used to aid memory, and in addition to that providing key words and manipulatives to aid response to recall questions for example "are you a boy or a girl?"
Early production-In teaching vocabulary related to animals, I would "act" and students guess what animal behaves like that. I would use lots of role-playing too so students have an opportunity to engage in such games as "act the animal". In addition, questions related to who said what would be answered by listening to other students in pairs or groups of three. This would include differentiated vocabulary and sentence stems as well as open-ended questions that I might use as the game went on.
Additionally, I would ask yes or no questions to check understanding.

Speech emergence-
Students would answer genuine authentic questions (Communicative Language Teaching) by participating in group discussions. The debate would require the student to work with others to solve problems be it comprehension or when using skits for dramatic interaction.
Intermediate fluency
Students would work in peer group pairing to solve problems needed for thematic discussions. Solutions would be solved in peer groups thus, for example, in debating what stance to take in either defending or rejecting the motion in question.
Advanced fluency
Students can create questions of their own to contribute to a topic of discussion. They could also individually contribute to the discussion with own opinions while observing any debate rules, for example using appropriate language, how to listen without interruptions and when to take turns.

Treatment Teacher 3:
Each stage of language development should have a question type that is lent to the skills the student currently has. For example:
Preproduction - You can focus their English learning on survival type responses such as "May I go to the restroom". You can give them a question in their native language, and have them point to their answer.
Early Production - You can ask a question in a yes/no response or an either/or response. You can also ask a question and they can choose between two answers in picture format.
Speech Emergence - You can begin to ask them questions that require a higher linguistic demand, but still basic enough for them to understand and answer. This can look like multiple choice type questioning or fill in the blank questions.
Intermediate Fluency and Advanced Fluency - The students can give written and oral statements on their topic rather than being limited to multiple choice or fill in the blank type questioning.

Question: How might you adjust the linguistic demands of your communication with an English learner to align with her stage of language development without reducing the level of cognition? For example, what types of cognitively challenging questions would be appropriate for a student at the following stages: preproduction, early production, speech emergence, intermediate fluency, advanced fluency?

Responses from Control Teachers

Control Teacher 1: Ask open ended questions; ask yes/no either/or questions; allow for dramatic play and acting out the vocabulary; use pictures and gestures....

Control Teacher 2: I would use visuals and scaffolded support for all stages. Pairing intermediate and advanced fluency learners with peers that would help them verbalize and apply the learning skills being taught. As time progresses, I would continue to give them more independent learning objectives and have them share their learning.
Control Teacher 3:
Preproduction- Show me the circle

EP- Who, what, when, where, why

SE- Why? questions

IF- questions requiring more than one sentence response

AF- Tiered questions

Conclusion

While participants from both treatment and control groups provided pedagogically accurate responses, treatment teachers provided more description for their use of the strategies. Treatment teacher 1 clearly explains how they would use the strategies from this MOOPIL to communicate with their English Language learners. Treatment teacher 2 provides extensive and thorough examples from their work with current students and describes in detail, how these strategies are used. Control teachers provide pedagogically correct statements per information provided in the MOOPIL, however they provide no evidence that they are currently using these strategies to meet the different linguistic needs of their students. They wrote very limited descriptions of their use of the strategies they learned about in the MOOPIL. These control and treatment teacher responses are representative of their groups indicating that   the treatment group with live VPD is supported to employ these strategies as they are learned and therefore can provide greater detail in their responses.

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