Massive Open Online Professional Individualized Learning: Building Teachers’ Instructional Capacity for English Learners

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Abstract

With the recent changes in student demographics in the United States and the development of technology, virtual professional development (VPD) for teachers of English learning students (ELs) has become a valuable means to support teachers and their students. We developed a federally funded, five-year VPD program, Project Massive Open Online Professional Individualized Learning (MOOPIL), and provided in-depth descriptions in this paper. We also examined its effectiveness in a sample of 359 teachers of ELs. The research instrument utilized is a battery of questions developed about the research-based content delivered in the MOOPILs. Our results supported the effectiveness of Project MOOPIL, as indicated by statistically significant differences and effect sizes across units. In this study, we provided encouraging evidence that VPD through Project MOOPIL impacted the teachers’ pedagogical background, knowledge, and skills, which are critical to enhancing quality instruction for English learners. The implication of this study is that professional development for teachers of English learners can be effectively employed virtually.

Keywords: English learners; virtual professional development; in-service teacher training

The Call for Virtual Professional Development for Teachers of English Learners

School districts are increasingly turning to online professional development to provide educators opportunities for iterative and persistent improvement in critical areas of curriculum, assessment, instruction, and technology (Bates et al., 2016; Irby et al., 2017). In this paper, we present Project Massive Open Online Professional Individualized Learning (MOOPIL), an online five-year project designed by scholars from a land-grant university in Texas and funded by the U.S. Department of
Our goal in the present study is to fill a gap in professional literature, reporting the results from online professional development exclusively for educators of English learners. Herein, we present the need for virtual professional development for educators of English learners, the conceptual framework used to develop Project MOOPIL, our research method and instrumentation, and a discussion of the results.

Through Virtual Professional Development (VPD) (Irby, 2017) with five cohorts, the goal of MOOPIL is to prepare 2,500 in-service teachers, 100 administrators, 100 paraprofessionals, and 100 parent/family members for making appropriate pedagogical decisions regarding the education of English learners (ELs) and economically challenged students (ECs) over five years. Participants gain professional development for better understanding and implementation of instructional strategies for ELs and ECs (at school or home). This VPD is offered in the form of short online courses, complete with learning objectives, research-based instruction, a discussion board, examples from the field, student reflections, and content-related quizzes. We refer to these courses as MOOPILs. Herein, we examined participants’ pre-existing knowledge, and to what degree their pedagogical knowledge of issues concerning instructing English learners has increased from their participation in MOOPIL. We found statistically significant differences between pretests and posttests across six units: Second Language Acquisition, Leadership for English Learners; Observation and Feedback; Classroom Environments for English Learners; Culturally Responsive Pedagogy; and Family Engagement. Each of these units consists of three to seven short courses or MOOPILs. The purpose of the study was to determine to what extent participants improved their pedagogical knowledge of ELs after they participated in the 37 individual MOOPILs comprising the seven units mentioned above. While acknowledging the limitations of results from the type of test that can be delivered online and automatically graded for hundreds of participants (comprised of multiple-choice, true/false, and matching), we do find value in reporting the significant gains from pre to post testing among this particular group from the first full year the project was delivered. These results provide a starting point from which we can analyze qualitative data provided by participants in the future.

Needs of English Learners

The number of English learners (ELs) is rapidly rising across the United States. According to a report by the National Center for Education Statistics, the percentage of ELs in the U.S. public schools increased from 8.1% (3.8 million students) in fall 2000 to 9.5% (4.8 million students) in fall 2015 (McFarland et al., 2018). There is a nationwide teacher shortage in the areas of Bilingual/ESL education, and in the state of Texas, this shortage has existed every year since 1990 (U.S. Department of Education, 2017). According to National Center for Education Statistics, EL students are performing at a “Below Basic” level in reading by 68% in Grade 4 and Grade 8 whereas 28% and 20% of non-EL students in Grade 4 and Grade 8, respectively, perform at “Below Basic” (National Center for Education Statistics, 2017). In mathematics, 47% of ELs perform at “Below Basic” compared to 17% of non-ELs in Grade 4, and by Grade 8, 71% of ELs perform at “Below Basic” compared to 27% of their non-EL peers (National Center for Education Statistics, 2017). These numbers represent achievement gaps that may not be overcome without teachers who are prepared to scaffold their learning appropriately. In an effort to close these gaps, we have designed MOOPILs to equip teachers to employ best practices for English learners.

English learners present unique needs to reach academic expectations that even good teachers, without the proper training, will fail to meet (Gándara & Santibañez, 2016). Good, Masewicz and Vogel (2010) provided several recommendations, including articulating and implementing a systemic plan in the district to meet ELs’ needs, creating an inclusive school and district culture, hiring bilingual teachers and staff to serve as cultural brokers, honoring multiculturalism, providing
support for bilingual students and their families, increasing family involvement, and conducting professional development (PD) for all teachers. We strive to meet these needs via Project MOOPIL in hopes that teachers who understand the fundamentals of second language acquisition, instructional leadership, assessment, cultural competence, and family engagement will gain an understanding of what language learners need.

**Virtual Professional Development (VPD) for Teachers of ELs**

Educators have an array of options for professional development offered online, making resources and developments in teaching strategies readily accessible (Irby et al., 2017). Regional education service centers, districts, and teacher preparation programs in Texas make efforts to prepare educators to meet the unique needs of ELs; however, extensive professional development (PD) for teachers of ELs is consistently found to be the most significant factor that contributes to instruction quality improvement and program effectiveness (Cheung & Slavin, 2012; Irby et al., 2017, 2018). Teachers can be familiarized via PD with new techniques of teaching in the content areas and new technologies for effective instruction, as well as cultivate multicultural competence (Lawless & Pellegrino, 2007). A common focus of PD for teachers of ELs is instructional strategies to support students’ development of academic English skills, such as building background knowledge and providing comprehensible input and opportunities to practice (Bowers et al., 2010; Irby et al., 2012). Some professional development providers also focus on adapting instruction in the content areas to meet ELs’ needs and combining the learning of the subject area with English language learning (Buxton et al., 2008). In addition to focusing on instructional strategies, more and more attention has been brought to relational aspects between teachers and ELs in PD. For example, in a PD program aiming to support teachers of ELs in pre-kindergarten, much focus is placed on values and attitudes, communication styles, and classroom environment (Hardin et al., 2010). Thus, teachers need to attain the knowledge and skills needed to integrate instructional strategies in the content areas while increasing opportunities for students to develop academic English while fostering a student-affirming learning environment.

Teachers come to PD with their own goals and objectives. The relevance of PD to their instructional practices and how it is tailored to meet their needs are paramount to their learning outcomes (Collins & Liang, 2013). Kolano et al., (2014) interviewed a group of teachers of ELs and identified their needs as well as factors that influence their sense of efficacy in working with ELs. Overall, teachers reported that they felt unprepared to work with English learners until they received more academic training and professional development. Teachers also suggested that their prior experience, knowledge about the culture, and attitudes towards teaching ELs all contribute to their sense of efficacy and confidence in working with ELs (Kolano et al., 2014). Despite educators’ expression of desire for PD geared toward teaching ELs, a paucity in programming remains. Li and Peters (2020) stated, “There are very few teacher training programs that combine research and services with the traditional professional training to meet immediate needs for the growing ELLs” (p.1504). Creators of virtual professional development for teachers must take participants’ needs, preferences, and learning obstacles into account in the design and implementation of its programming (Alzahrani & Althaqafi, 2020). Project MOOPIL was created to make research-based training accessible to teachers.

To develop effective PD programs and help teachers meet their goals and objectives, several standards of PD, particularly virtual professional development (VPD), have been proposed. For example, Irby (2017) proposed 14 standards for delivering effective and quality VPD which can be seen in Figure 1.
MOOPIL was designed with these recommendations in mind. The 14 Standards for delivering effective and quality VPD are:

1. Establish clear goals of the VPD and articulate the goals to the participants;
2. Establish the technical requirements needed to use the VPD;
3. Provide the objectives for each VPD session;
4. Provide the time commitment on the part of the participants;
5. Offer content-rich, up-to-date research-based information;
6. Provide content that is immediately applicable to teachers and leaders;
7. Ensure the visuals and audio presented are of high quality;
8. Give links in the VPD to supporting documentation or provide links to PDF documents;
9. Provide scaffolded, sequentially designed VPD session as appropriate;
10. Be accessible as the presenter either via a blog, email, or other media feedback;
11. Provide questions for reflection, application, and transformation;
12. Request feedback from the participants for each session in the form of an evaluation;
13. Provide professional development hours to participants (hours may be based on state requirements); and
14. Provide certificates or badges for participants based on the number of hours committed and completed. (Irby, 2017, p. 37)
Virtual Professional Development has its unique advantages over other forms of PD. It is informal, individualized, and open-access, but still preserves some structure and purposes with its clearly stated objectives and the potential involvement of a facilitator (Irby et al., 2015). Irby et al. (2015) surveyed teachers involved in a VPD program for elementary bilingual teachers and found that the convenience of online delivery coupled with high-quality instruction and feedback was a draw for teachers to virtual professional development. Teachers expressed positive attitudes toward VPD as a convenient way to access valuable content (Tong et al., 2015).

Conceptual Framework for Project MOOPIL

Through Project MOOPIL, we provided VPD for educators of, or potential educators of ELs in a virtual format. According to researchers (Lara-Alecio et al., 2012) successful VPD for teachers of ELs does the following: (a) reflects best available research and practice related to teaching ELs, (b) facilitates teachers’ development in subject-matter content, ESL/Bilingual teaching strategies, use of integrated technologies and other essential elements in teaching standards aligned curriculum, (c) encourages teachers’ improvement in practice through inquiry, (d) involves substantial on-going time commitment on the part of the teachers and the developers, (e) is assessed related to the impact on teacher effectiveness and ELs’ learning, and this assessment guides subsequent professional development efforts (Lara-Alecio et al., 2012). We applied each of those principles equally to the work of MOOPILs. Via Project MOOPIL, we deliver current research-based virtual PD opportunities. Objectives of Project MOOPIL are summarized as follows:

- Increase the number of highly effective paraprofessionals or other educators and parents in schools with high concentrations of high-need students;
- Provide and use strategies that are supported by promising evidence and moderate evidence;
- Recruit and prepare future educators and/or parents;
- Provide professional development activities to administrators, paraprofessionals and teachers;
- Provide professional enhancement activities to student advocates (Irby, 2017).

Project MOOPIL includes training in second language acquisition foundations, leadership for English learners, observation and feedback, inclusive and culturally competent practices, instructional leadership, and family engagement. These units of instruction are available for teachers, administrators, paraprofessionals and families desiring to improve the implementation of instructional strategies for English learners. The MOOPIL courses also incorporate Texas Education Certification Examination Teacher standards for Bilingual and ESL teachers, which are noted as follows:

- Knowledge of the foundations of bilingual education and the concepts of bilingualism and biculturalism;
- Process of first- and second-language acquisition and development;
- Comprehensive knowledge of the development and assessment of literacy in the primary language, of biliteracy, and content-area instruction in L1 and L2 (Texas Education Agency, 2018a);
- Fundamental language concepts and knows the structure and conventions of the English language;
• Knowledge of the foundations of ESL education and factors that contribute to an effective multicultural and multilingual learning environment, ESL teaching methods and uses this knowledge to plan and implement effective, developmentally appropriate ESL instruction;

• Knowledge of the factors that affect ESL students’ learning of academic content, language, and culture;

• Formal and informal assessment procedures and instruments (language proficiency and academic achievement) used in ESL programs and uses assessment results to plan and adapt instruction; and

• How to serve as an advocate for ESL students and facilitate family and community involvement in their education (Texas Education Agency, 2018b).

This list of standards provides a framework of the pedagogical knowledge needed by an educator of ELs, as set forth by the Texas Education Agency. Project MOOPIL personnel builds courses based on these standards, supported by current research, via a convenient online portal (Canvas) containing self-paced modules. Teachers in the state of Texas must accrue Professional development micro-credential certificates are provided to participants at the end of each MOOPIL as continuing professional development for their evaluation, improvement, and re-accreditation in the state of Texas.

**Method**

**Research Design, Context, and Research Question**

For this study, we employed a quasi-experimental design (QED) with pre- and post-testing within Project MOOPIL. The context for the QED is within a virtual environment for professional development for teachers who teach second language learners across Texas schools. Findings for each learning unit were based on a paired sample t-test to determine growth in knowledge from pre to post per MOOPIL unit. The research question for this study was: Did participants improve their pedagogical knowledge related to teaching ELs after they participated in 37 MOOPILs?

**Participants**

Participants of the current study included 359 teachers across 341 different schools in the state of Texas. The majority of participants were female (87.6%). Regarding their teaching experiences, 10% of participants identified themselves as first-year teachers, 21% of participants had 2-5 years of experience, 19% of participants had 6-10 years of experience, 17% of participants had 11-15 years of experience, 11% of participants had 16-20 years of experience, and 17% of participants had more than 20 years of experience. The rest of the teachers did not report their years of experience. In terms of grade levels taught, 48% of teachers taught in elementary, 30% taught in middle school, 22% taught in high school. Participants were recruited through email campaigning. Emails were sent from project personnel to district administrators across the state of Texas, and these administrators shared information about the project with their faculty and staff. All certified Texas teachers were invited to participate at will.

**The Intervention**

A MOOPIL is an online learning course containing specific objectives, instruction based on research, online discussion boards, reflection prompts, and assessments (Irby, 2017). Our 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 pretest to assess existing knowledge. At the end of the MOOPIL participants take a post-test with the same questions. Figure 1 displays a screenshot of MOOPIL delivery in Canvas.

L.E.A.D.E.R. Organization

The VPD includes a developed structure of L.E.A.D.E.R. (Irby, 2017). Each module is organized using the L.E.A.D.E.R. acronym which stands for (a) Leading Question, (b) Engagement, (c) Applied Research, (d) Discussion, (e) Example(s), and (f) Reflection. Before delivery of instruction begins, participants take a pre-quiz containing questions based on the applied research in each MOOPILs. Delivery begins with a leading question that builds background and activates prior knowledge. This is a specific question or questions participants explore through the module as they build instructional capacity to affect diverse learners. There is then an engagement scenario, or lesson hook, which includes an introductory video, other media, quote, or question to set the stage for each module.

Content of the Modules

What follows the pre-test and hook is applied research regarding the topic in question. This is the scientific basis used to support the content shared in the module. Participants then engage in a discussion about what they are learning. Discussion questions are the follow-up questions that advance the leading question(s). Examples and/or non-examples are then provided to elaborate on their discussion and individuals gain examples they can directly take from this module to improve their pedagogy. Participants complete a reflection on their learning. In this section, participants reflect on what can be done to apply this learning to build instructional capacity and improve student outcomes. Participants then take a posttest to assess knowledge gained. Before participants receive a certificate of completion for the MOOPILs, they must take the pre and posttests, post on the discussion board, and submit a reflection. They must also complete all of the MOOPILs in a learning unit before receiving professional development hours as a micro-credential. A learning unit is comprised of several MOOPILs about the same topic (e.g., second language acquisition).

Non-negotiables

There are five non-negotiables of the MOOPIL intervention:

1. MOOPILs must be openly accessible to all.
2. MOOPILs must be supported and developed by professionals with expertise.
3. MOOPILs must be informal individual learning that engages participants in reflection for transformative practice.
4. MOOPILs must not go beyond a 3-week window of time.
5. MOOPILs are targeted toward skills about which participants might have an interest in learning more in-depth. (Irby et al., 2015, p. 351)

Instrument

Participants took a pretest of approximately four content-related questions per each of the 37 MOOPILs, totaling 128 questions. These questions were created by a team of content-area experts possessing advanced degrees in Bilingual/ESL Education and related fields as well as teaching experience. (Please see Appendix for the full list of questions.) A sample of the questions from the MOOPIL entitled, Funds of Knowledge, follows.
1. To what does the term, “funds of knowledge,” refer? (select all that apply) skills, talents, abilities, traditions, cultural experiences, DISTRACTORS: financial capital, heirlooms

2. What are the strategies that facilitate students’ learning? (select all that apply) modeling, prompting, reinforcing responses, direct teaching, hands-on experience DISTRACTORS: additional practice through homework, calling on struggling students, worksheets

3. What is crucial to the dynamics between the family and outsiders who are working with the family, especially with families of diverse ethnic descents? [Trust]

4. One way to develop interactive partnerships with parents is through ________ in which a committee of parents, teachers, administrators, and community members work to nurture and maintain strong links between schools, families, and communities. Action Teams, DISTRACTORS: Action Plans, Action Items, Action Agendas

The complete tests are available in the Appendix. It is important to note that participants may choose which courses, and how many courses they want to take. These questions were developed about the research-based content delivered in the MOOPIL. Participants were then given a posttest comprised of the same questions. All participants in this group receive the same intervention (MOOPIL applied research instruction) and are not assigned to any group. Each participant must take the pre and post quizzes to receive credit for the MOOPIL micro-credential. Internal consistency in the form of Cronbach’s alpha is listed in Table 1.

### Table 1. Cronbach’s Alpha Levels for Internal Consistency

<table>
<thead>
<tr>
<th>Module</th>
<th>Pre Quiz Alpha</th>
<th>Post Quiz Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Language Acquisition Foundations (SLAF)</td>
<td>.65</td>
<td>.86</td>
</tr>
<tr>
<td>Leadership of English Learners (LEL)</td>
<td>.47</td>
<td>.71</td>
</tr>
<tr>
<td>Observation and Feedback (OF)</td>
<td>.53</td>
<td>.69</td>
</tr>
<tr>
<td>Classroom Environment for English Learners (CE)</td>
<td>.57</td>
<td>.50</td>
</tr>
<tr>
<td>Cultural Responsiveness (CR)</td>
<td>.71</td>
<td>.85</td>
</tr>
<tr>
<td>Family Engagement (FE)</td>
<td>.63</td>
<td>.58</td>
</tr>
</tbody>
</table>

### Data Collection

The data were collected via the learning management system, Canvas. As the participants progressed through the MOOPILs, they encountered an online quiz that captured and stored each participant’s responses. Quizzes were automatically graded by Canvas. Data were exported communicating true as 1 and false as 0 via .csv. These files were then imported to SPSS version 25. This study was approved in 2017 under the Texas A&M University Institutional Review Board (IRB2017-0764D).
Data Analysis

Data were analyzed using SPSS version 25. Descriptive analyses were first conducted. Paired-samples t-tests were then conducted to examine participants’ knowledge gains from pretest to posttest on the seven units of instruction comprising MOOPIL. Cohen’s ds were also calculated to measure effect sizes. Cohen’s d is a widely used effect size metric that represents the standardized difference between two means. A larger d indicates a larger difference between the two means, and therefore, a more effective treatment (Goulet-Pelletier & Cousineau, 2018). Cohen’s d corrects for ceiling and floor effects, which makes it an appropriate effect size metric for the present study (Nissen et al., 2018).

Results

Results of descriptive analyses, paired-sample t-tests, and Cohen’s ds are summarized in Table 1. Participant achievement was statistically significant in all learning units. The alpha was set at .05. In Table 2, we display pre and posttest participant achievement from Year 1. Statistically significant and positive gains from pretest to posttest were observed on all of the units: Second Language Acquisition Foundations (SLAF); Leadership of English Learners (LEL); Observation and Feedback (OF); Classroom Environment for English Learners (CE); Cultural Responsiveness (CR); and Family Engagement (FE). The fluctuation from pre to posttests stemmed from attrition reportedly due to busyness in schedule or life events that impeded participant completion of the units.

Table 2. Participant Achievement from MOOPIL

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th></th>
<th>Post</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>SD</td>
<td>N</td>
</tr>
<tr>
<td>Second Language</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisition Foundations</td>
<td>218</td>
<td>.55</td>
<td>.14</td>
<td>122</td>
</tr>
<tr>
<td>Leadership of English</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learners (LEL)</td>
<td>121</td>
<td>.51</td>
<td>.16</td>
<td>80</td>
</tr>
<tr>
<td>Observation and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feedback (OF)</td>
<td>84</td>
<td>.41</td>
<td>.17</td>
<td>65</td>
</tr>
<tr>
<td>Classroom Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for English Learners</td>
<td>167</td>
<td>.56</td>
<td>.12</td>
<td>107</td>
</tr>
<tr>
<td>Cultural Responsiveness</td>
<td>67</td>
<td>.60</td>
<td>.15</td>
<td>58</td>
</tr>
<tr>
<td>Family Engagement (FE)</td>
<td>79</td>
<td>.67</td>
<td>.13</td>
<td>26</td>
</tr>
</tbody>
</table>

*** p < .001

Cohen’s d above 0.8 indicates a large effect size and between 0.5 and 0.8 indicates a medium effect size (see Goulet-Pelletier & Cousineau, 2018). Almost all of the ds fell into the large effect size category with the only exception of Classroom Environment for English Learners (CE). Overall, participants showed significant gains in their knowledge of serving ELLs after their participation in MOOPILs.
Initial Qualitative Findings

Teachers from year one reported that the strategies in the MOOPILs were essential to increasing their ability to instruct ELs in the classroom. One teacher commented, “The courses helped me learn that multisensory teaching is the best for students who are just learning the English language and those who are struggling with their learning.” While another participant stated that the MOOPILs helped them, “By analyzing and putting into perspective the needs of the ELs and my language learners.” Another teacher said, “This course helped me with my ability to break down a lesson and present it in an organized manner.” Teachers also shared their thoughts on how MOOPILs helped them engage more with family members of ELs as well. A teacher commented, “The MOOPIL about engaging with English language learner families was really eye-opening for me. I am more focused on reaching my parents who I cannot easily communicate with so I better understand their wants and needs for their student.” While another teacher stated, “It encourages us to welcome family cultures into the classroom in meaningful ways.” These initial findings encourage us to qualitatively investigate participants’ experiences in a future paper.

Discussion

In this study, we aimed to examine participants’ pre-existing knowledge of instructing ELs and their learning outcomes in an online professional development platform and structure with MOOPIL L.E.A.D.E.R. We found that participants’ content knowledge of issues concerning instructing ELs varied across different MOOPIL units and that Project MOOPIL had a positive impact on participants’ content knowledge.

The seven units of MOOPIL addressed fundamentals of second language acquisition, leadership for English learners, observation and feedback, classroom environments, cultural responsiveness, and family engagement. This framework was designed to promote broad understandings of instructional effectiveness in teaching ELs. For example, in the Second Language Acquisitions Foundation unit, participants were offered an introduction of second language acquisition as well as concepts of comprehensible input, the affective filter, the transferable nature of language proficiency, and cognitive academic language proficiency. These concepts assist teachers in helping them to leverage students’ first language to support the acquisition of the English language. In a different PD program targeting Spanish-speaking ELs and their teachers (Irby et al, 2017), teachers were asked to review theories of second language acquisition. The need to review second language acquisition persists because pre-service teacher training may include two courses on the instruction of ELs, perhaps not allowing enough instruction for a strong knowledge base on these concepts to take place. Other factors in previous teacher development, such as the decade, institution, or time-lapse may also account for gaps in pre-existing knowledge on second language acquisition. In another unit, Leadership for English Learners, we included information regarding ELs in U.S. schools, professional learning communities, benefits of dual language and primary language instruction, and best practices for accelerating language acquisition. Participants learned demographics concerning ELs in Texas and the U.S., as well as the benefits of affirming their language and identity on their academic, cognitive, social, emotional, educational, socioeconomic and professional outcomes. In Observation and Feedback, we shared with participants how to use the Transitional Bilingual Observation Protocol (TBOP) (Lara-Alecio & Parker, 1994). This is the first observation protocol created based on theoretical understandings of the dimensions of language learning: (a) activity structures, (b) language mode, (c) language of instruction and language of student response, and (d) language content. Participants coming from monolingual backgrounds likely had never been exposed to the concepts in this unit, which may account for their low pretest scores for that unit. Participants learn how to use TBOP as a useful tool used in the
classroom to observe and record instructional events with an emphasis on teacher-student interaction. The instrument allows teachers to document the language of instruction, language content, activity structure, communication mode, and English as a Second Language (ESL) strategies. In this unit, participants also learned how to use assessment and data to drive their instruction, as well as positive ways to provide error correction and feedback. *Classroom Environments* contained information on specific strategies proven to create positive environments which assist English learners (and all learners) academic language proficiency. In this unit, participants became aware of the importance of the socio-emotional needs of ELs. Specifically, they, (a) discovered the benefits of interactive activities, (b) the importance of language-rich classrooms, (c) instructional strategies and organizational routines to reduce student anxiety, and (d) ways to include movement and collaborative learning. Participants also became familiar with scaffolding strategies for ELs. *Cultural Responsiveness* included information about student and faculty perception of topics such as language status. Participants gained an awareness of the importance of fostering equitable and culturally and linguistically responsive classrooms learned how to establish equitable environments that value the status of both the home language and English, and explored ways to infuse culturally and linguistically responsive teaching into their practice. Furthermore, participants discovered guidelines for effective English as a Second Language (ESL) instruction for English learners through a framework that recognizes the rich and varied cultural wealth, knowledge, and skills that diverse students bring to schools. The unit of *Family Engagement* was constructed to provide information to both teachers and parents. This unit aimed to increase parents’ awareness of the benefits of bilingual education and the importance of their involvement in school. It included MOOPILs about education programs, the advantages of being bilingual, and how to help their children learn to read. These units went beyond specific instructional techniques and focused more on creating a supportive and inclusive school climate for ELs.

**Limitations**

We cannot and do not make sweeping claims that teachers increased in their pedagogical knowledge to the extent that they are fully equipped to perform as high-functioning EL educators based on the results of the multiple-choice tests given after each unit. We acknowledge that multiple-choice tests do not require participants to formulate their answers. The reason multiple-choice tests are necessary and included is that this is a massive project, serving hundreds of educators per year; thus, multiple-choice questioning is the most efficient way to assess learning. Project MOOPIL also contains a reflection cycle in which participants must collect and provide evidence of their implementation of the strategies presented in Project MOOPIL. They also participate in a discussion board and post a personal reflection after each course. Future studies will include these in mixed-methods studies or stand-alone qualitative studies to put the information presented here into greater context and provide a greater understanding of the effectiveness of this project. We simply present the results from our pre- to post-testing as a starting point for analysis and to guide us as we continue to develop and improve this resource for EL educators.

**Conclusion**

Many education programs in the United States are educators striving to prepare all teachers to meet the needs of ELs effectively (Samson & Collins, 2012). Project MOOPIL is one such program, and exemplifies how research-based practices can be delivered through VPD via learning management systems such as Canvas. Resources such as MOOPILs and the structure of L.E.A.D.E.R., combined with an individual’s motivation for improvement can help increase the instructional capacity for educators of ELs. Through MOOPILs, educators now have the ability and flexibility to grow...
professionally, and can, therefore, be better equipped to assist ELs in reaching their maximum potential in school.

Suggestions for Future Research

Further research on the implications of MOOPILs on teachers abilities to assist ELs in the classroom is needed. In addition to the quantitative data provided in this paper, we will collect and analyse the qualitative feedback about Project MOOPIL participants are providing in an effort to understand how MOOPILs are having an impact on teachers’ abilities to interact with ELs in their classrooms, as well as with parents and family members of ELs. We believe this study provided encouraging evidence that VPD through Project MOOPIL impacted the teachers’ pedagogical background, knowledge, and skills which are critical to enhancing quality instruction for English learners.

About the Authors

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References


Appendix: MOOPIL Questions

Second Language Acquisition Foundations

SLAF M1: Fundamental Concepts of Second Language Acquisition

2. Language learning is preferred over language acquisition by current researchers and practitioners. FALSE
3. Language learners should be prompted to speak early in the language learning process. FALSE

SLAF M2: Stages of Second Language Acquisition

1. An English learner needs three years of second language development to gain the fluency needed to be able to do well in school. FALSE
2. Match the stage of language acquisition with its corresponding characteristic:
   Pre-production: has minimal comprehension without scaffolds
   Early production: responds using one or two words
   Speech emergence: can produce simple sentences (e.g., I like milk.)
   Intermediate fluency: has difficulty understanding academic language and abstract language in new contexts
   Advanced fluency: communicates with near-native fluency

SLAF M3: Increasing Comprehensible Input

1. Stephen _________ is a language acquisition scholar who expressed the formula for comprehensible input as i+1. (Krashen)
2. Effective language instruction incorporates plenty of vocabulary and grammar drills. FALSE
3. Good ways to increase comprehensible input include the following. Select all that apply. (Multiple answer: pictures, realia, gestures, and intonation) (Distractors: additional drills, homework, textbook reading.)

SLAF M4: The Role of the Affective Filter

1. Students need high pressure placed on them in order to achieve rapid linguistic and academic goals. FALSE
2. Chronic, negative emotional states send stress hormones to the region of the brain associated with memory, processing, and learning called the ___________. (hippocampus.)
3. Match the corresponding traits to their environment type.
   Focusing on meaningful communication – low-stress
   Avoiding an overemphasis on error correction – low-stress
   Not placing students in awkward situations – low-stress
Selecting and calling on individual students to answer questions in class – high-stress
Grading homework – high-stress
Moving on to another student after an incorrect answer – high-stress

SLAF M5: The Transferable Nature of Language Proficiency

1. Instruction in English learners’ primary language prevents them from developing English skills. FALSE
2. The brain has the capacity to store and develop multiple languages simultaneously. TRUE
3. Researcher Jim Cummins likened the concept of Common Underlying Proficiency to an what? (iceberg)

SLAF M6: Developing Cognitive Academic Language Proficiency

1. BICS stands for ___________. Basic interpersonal communication skills
2. CALP stands for ___________. Cognitive Academic Language Proficiency.
3. It takes approximately two years for English learners to acquire the English skills necessary to perform at grade level. FALSE

SLAF M7: Other Factors Affecting Second Language Acquisition

1. The second language acquisition process is always linear and predictable. FALSE
2. Quality of _________ __________ is a factor in the length of time an EL needs to acquire the second language. (language instruction)

Leadership for English Learners

LEL M1: ELs in U.S. Schools, Part 1

1. Currently in the United States, how many students out of ten are English learners? 1
2. Approximately, what is the percentage of English learners in Texas currently? 20%
3. From 2014 – 2015, the EL population grew by over 40% in how many states? 5
4. Most EL students are born in the United States.

LEL M2: ELs in U.S. Schools, Part 2

1. Texas A&M University publishes the Texas Academic Performance Report (TAPR) annually. FALSE
2. The Performance-Based Monitoring Analysis System (PBMAS) monitors performance on Texas’ district and campus performance in areas such as Bilingual Education and ESL, Career and Technical Education, the Every Student Succeeds Act, and Special Education. TRUE

LEL M3: Facilitating Professional Learning Communities

1. Match the terms with the best descriptions. | professional development – top-down, training model of in-service; professional learning – learning something new that is potentially of value
2. Select all that professional learning provides. ANSWERS: greater chance for ownership, conversation, deep understanding, and goal-directed activity | DISTRACTORS: credentialing, CPE credits
3. Which model is more closely related to a one size fits all, one time event? ANSWER: professional development

LEL M4: Dual Language Rationale and Research Base

1. Decisions on program models and curriculum are based on program effectiveness and research. FALSE
2. Sheltered instruction is an additive model. FALSE
3. Developing high levels of proficiency in the home language supports English acquisition and high levels of English academic achievement. TRUE

LEL M5: Benefits of Primary Language Instruction

1. First language, home language, and primary language are synonymous terms conveyed by the shortened term __. (L1)
2. ELs with more advanced oral proficiency and literacy in the home language demonstrate more advanced levels of English literacy compared with ELs with lower levels of home language abilities. TRUE
3. The brain one has the capacity to store and develop one language at a time. FALSE

LEL M6: Best Practices for Accelerating Language Acquisition

1. If educators provided ELs with appropriate instruction and support, the reasonable time to English proficiency can be greatly reduced to _ years or less. (Enter answer numerically.) (4)
2. The National Academy of Science recommended _ practices to support EL’s educational success. (Enter answer numerically.) (7)

Observation and Feedback

OF M1: Transitional Bilingual Observation Protocol – TBOP (PM)

1. What are the four dimensions of TBOP? language of instruction, language content, communication mode, activity structure
2. The BICS component of TBOP consists of what two things? social routines and classroom routines.
3. The CALP component of TBOP consists of what two things? light cognitive content and dense cognitive content.

OF M2: Using Assessments and Data to Drive Instruction (PM)

1. Matching | Reliability – the assessment for a given student is consistent and similar regardless of who assesses the student, the time of administration, or method used. | Validity – the assessment reflects what it is intended to measure. | Norm-referenced criteria: compares students’ performance to where they should be at a specific grade or age level.
2. STAAR is an example of what type of assessment? Criterion-referenced
3. Assessing before teaching is a first step in differentiating instruction. True

OF M3: Using Corrective Feedback: Do’s and Don’ts (PM)
1. To whom do students respond more positively in receiving feedback? Peers, teachers, parents
2. Students demonstrate the most gains on standardized exams when classrooms are conducive to receiving feedback without [negativity].
3. When does the most effective feedback, given through cues or reinforcement, occur? following a learning task DISTRACTORS: as soon as a mistake is made, after class

Classroom Environment for ELs
CE M1: Interactive Activities

1. Which of the following activities yields the highest retention rate?
   a. Listening
   b. Teaching others
   c. Practicing
2. Students who learn content through interactive activities tend to use the content in ________ situations. (difficult, leisurely, routine)
3. True or False: Classroom interactive activities require access to media and technology. (FALSE)
4. (Check all that apply.) Games can be used for what purpose(s):
   a. Review (CORRECT)
   b. Presentation of new material (CORRECT)
   c. Entertain (CORRECT)
5. _______ yields the least amount of retention, while practice and teaching others yields retention levels of 75% and 90% respectively. (Listening)
6. Student-centered, interactive, hands-on activities are strategies in which students ________ with content. (actively engage)
7. Interactive and collaborative classroom games are a means to ________ students and make them active participants in their ________. (challenge, learning)
8. _______ has been associated with better overall learning outcomes and a 20-percentile point increase in student achievement on test scores. (Gaming)

CE M2: The Language Rich Classroom

1. ________ is the core to learning new skills and understanding complex keyconcepts in other subject areas. (language competence) DISTRACTORS: parental involvement, social intelligence
2. A variety in the teacher’s ________ ________ during instruction contribute to the creation of a language rich classroom.
   a. Physical position (correct)
   b. Mental attitude (incorrect)
   c. Sense of humor (incorrect)
3. (Check all that apply.) Which of the following is / are example(s) of specific teaching techniques to build a LRC?
a. implementing a variety of grouping techniques (e.g., large group, small group, and individual).
b. Providing sentence stems and visuals
c. Employing a variety of shared formats (e.g., discussion, description, explanation, question and answer). ALL ARE CORRECT
4. _______ are the source of information and do most of the talking in a language-rich classroom. (Students)
5. Some of the best indicators of a child’s potential for success with reading and writing are _______ _________ and _________ skills. (oral language, meta-linguistic)
6. Which of these is one of the five components that are essential to understanding the LRC. (Recurrence)
7. What are the 4 pillars of language in LRC? (listening, speaking, reading, and writing)

CE M3: Reducing Anxiety

1. What is the order of the stages that ELs may go through when entering into a new culture? (a., b., c., d.)
   a. Euphoria
   b. Culture shock
   c. Acceptance
   d. Assimilation/Adaptation
2. Classroom rules need to (b.)
   a. Be comprehensive
   b. Define behaviors clearly
   c. Be detailed and well elaborated
   d. Focus on problematic behaviors
3. Students could benefit from understanding classroom routines because routines executed consistently offer ____. (predictability)
4. Routines include:
   a. determining situations where a routine or procedure is needed,
   b. outlining the routine or procedure,
   c. teaching the most important routines or procedures first, and
   d. reviewing routines or procedures as needed.
5. Design language teaching and learning with attention to the __________ context. (socio-cultural) DISTRACTORS: political, situational
6. Analyze the academic language demands involved in _________ teaching and learning. (grade-level)

CE M4: Integrating Movement

1. It is believed that people remember __ % of what they hear, but __ % of what they do. (10, 90)
2. A change in _______ is one of the easiest ways of gaining students’ attention. (location)
3. Teachers need to provide content breaks to allow the brain to remap __________.
   (cognition)
4. A natural motivator for our bodies are feelings of: (Select all that apply). Correct
   answers: urgency | risk. Distractors: success | pride

CE M5: Using Cooperative Groups

1. Which of the following are elements which set effective cooperative learning
groups apart from typical group work? Answer: d.)
   a. Positive interdependence
   b. Team building activities
   c. Group processing and reflection
   d. All of the above
2. How does cooperative grouping help ELs? (Answer: b., c., & d.)
   a. ELs can rely on native speakers to do the work
   b. ELs can get more opportunities to hear a message delivered in varying ways
   c. There are increased opportunities in a safe environment to engage
   d. There is increased opportunity for repetition

CE M6: Scaffolding

1. Lowering academic rigor and providing remedial, unchallenging content is
   sometimes needed for EL’s to be able to progress academically. (false)
2. The term ________ describes the process used to help learners accomplish tasks
   that they would be unable to perform on their own without help. (zone of proximal
   development).
3. Select the scaffolding strategies.
   (Possible answers)
   - Use many physical gestures while talking (e.g., point and show, facial expressions,
     pantomime, modeling).
   - Adjust teacher talk (e.g., speak slowly, emphasize key words).
   - Use visuals, pictures, and videos.
   - Use visual aids such as anchor charts and graphic organizers.
   - Use manipulatives.
   - Write key words on the board.
   - Label objects and visuals with key vocabulary.
   - Allow student to point to pictures, act out vocabulary.
   - Do not force student to speak, but teach them “survival language” such as “May I
     go to the bathroom?;”
   - Allow student to respond with pictures, pointing, or gestures.
   - Ask student yes/no or either/or questions.
   - Use sentence stems.
   - Teach cognates.
   - Pre-teach vocabulary.
   - Use choral reading, songs, and poems.
   - Provide listening activities.
Relate and connect the content to student’s personal life. Provide prompts if necessary.

Cultural Responsiveness

CR M1: Cultural and Linguistic Equity

1. What are three characteristics of culturally responsive teaching? (Answer: a., b., & d.)
   a. A way of thinking that considers and responds to students’ backgrounds
   b. An approach that focuses on effective and responsive teaching approaches
   c. Curriculum that can be implemented regardless of teacher mindset or awareness
   d. A mindset that recognizes the importance of relationships between teachers and students

2. What are ways you can create an equitable learning environment? (Answer: b., c., & d.)
   a. Apply “inclusive” and feel-good” activities to compensate for ineffective teaching practices
   b. Promoting the status of different home languages
   c. Valuing the cultural backgrounds of all students
   d. Encouraging students to value and affirm all students’ backgrounds

3. True or False: Culturally and linguistically responsive teachers may lower expectations for ELs so they do not have to perform at the same level as native speakers. Answer: False. Culturally and linguistically responsive teachers empower ELs by scaffolding the instruction and continuing taking steps to ensure that ELs are high achieving.

CR M2: Infusing Culturally and Linguistically Responsive Pedagogy

1. Can a teacher successfully cultivate culturally and linguistically responsive teaching regardless of their mindset or awareness? (false)

2. Which of the following is NOT a step that teachers of ELs should take to nurture culturally and linguistically responsive environments? (b.)
   a. Take responsibility for fostering equitable learning environments.
   b. Indulge in a series of “inclusive and feel-good” activities.
   c. Purposefully manage student participation and grouping.
   d. Create a culture that emphasizes high expectations.

3. _______ involvement an important component of infusing culturally and linguistically responsive teaching. (Family)

4. Culturally and linguistically responsive teaching is: (Answer: d.)
   a. a way of thinking that considers and responds to students’ backgrounds.
   b. a mindset that recognizes the importance of relationships between teachers and students.
   c. a plan to promote high student success and achievement.
   d. all of the above.
CR M3: Dual Language Methodologies

1. Which of the following is NOT a characteristic of meaningful communicative experiences? (Answer: c.)
   a. Student-centered
   b. Tailored to the language learner’s language proficiency stage
   c. Engaging and intriguing
   d. Tailored to the language learner’s needs

2. Dual language teachers should ___ (a.)
   a. Provide explicit instruction to students
   b. Ask students to drill new materials
   c. Translate vocabulary and grammar structures for students
   d. Engage students in activities to assist with memorization

3. ________ in dual language classrooms can support the goals of strong bilingual, bi-literacy development, and sociocultural competence. (Grouping practices)

4. Dual language teachers should avoid the concurrent use of the two languages until students have developed some proficiency in both languages. (True)

CR M5: Guidelines for Effective ESL Instruction

1. National attention is focused on the need to provide a ____________ teacher in every classroom. Culturally responsive, culturally diverse, globally diverse

2. Match correct and incorrect answers. In general, vocabulary can be divided into two components:
   oral vocabulary – correct
   reading vocabulary – correct
   explicit – incorrect
   implicit – incorrect

3. Match the terms.
   Explicit instruction – teaches students the definitions of words in student friendly language
   Implicit instruction – teaches ELs to read and learn through the context in which an unknown word is surrounded
   Strategy instruction - teaches ELs to link their background knowledge to new concepts for meaningful associations and have strategies that they can use to successfully resolve problems in comprehension due to lack of vocabulary

Family Engagement

FE M1: Selecting the Best Education Program for your Child

1. It is not necessary for parents to maintain strong ties with their child’s school. False
2. The goal of bilingual education is to capacitate students to be academically competent only in English. False
3. In order to improve the education of your child, it is recommended to always motivate your child by showing that you value and have a positive attitude toward education. (fill in the blank)
FE M2: The Advantages of Being Bilingual

1. Students learning more than one language will take longer in their linguistic development than a monolingual student who is learning one language only. TRUE
2. Acquiring more than one language at a time is confusing for children. FALSE
3. Different languages, even though they might seem to operate separately, are completely: (multiple choice)
   a. Interdependent
   b. Interpersonal
   c. Interchangeable
4. Increasing a bilingual child’s performance begins with proficiency in: (multiple choice)
   a. Native language
   b. School norms
   c. Social relationships
5. It is recommended that parents of a bilingual child should continuously speak to their child in the parents dominant languages. TRUE

FE M3: Help your Child Learn to Read

1. The skill of reading begins before your child begins school. True
2. Speaking to your child a lot helps them learn to read. True
3. How many stages are there to becoming an expert reader? (4)
4. What are the stages of reading proficiency? Pre-reader, beginning reader, fluent reader, expert reader
5. What are some reasons that telling stories of your childhood to your child helps them learn to read?
   a. It helps your child listen to language, learn story sequence, and know about characters – correct
   b. It allows your child an opportunity to listen and predict events in the story – correct
   c. It makes them calm down – incorrect
   c. It makes them be quiet – incorrect

FE M4: Beginning Readers

1. Parents of ELs value education and have high aspirations for their children. (fill in the blank – matching)
   a. Value education | High aspirations
   b. Are not involved | low expectations
   c. Work hard | much pride
2. Very young children begin to develop an awareness that symbols and print convey meaning. (fill in the blanks)
3. Very young children may begin to associate physical cues such as logos with meaning. True
4. It is important to not speak to your child or read to them in your native language, because this will slow the learning process and cause confusion for your children who are learning English. False

5. POSTTEST: On a scale of $1 - 5$, how would you rate this course “Family Engagement”?

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