

**Multilingual Learner Program Instructional Document Content Analysis
in a New Hampshire Public School**

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Abstract

Multilingual learners (MLL) are a large and growing group of disadvantaged students in the United States public education system who come from refugee and immigrant backgrounds and require linguistic instruction, in addition to content instruction. MLLs are entitled to language instruction, and school districts receive additional funding for these services under the Office of English Language Acquisition. However, data and documentation of the quantity and quality of the linguistic additive instructional services have yet to be defined in educational policy. Through this exploratory document analysis study, the data discovered in 30 MLL documentation files in a public education setting were found to be scarce and disjointed. While the files contained a predominant amount of summative assessment data on English language proficiency, there were limited instructional data documenting the quality and quantity of the additive instructional experiences. The findings suggest the need for clearer directives on MLL data documentation and enhanced data documentation variety beyond demographic and summative data sets. Enacted instructional data was amongst the documentation greatly absent from the MLL files, leaving much to ponder regarding the instructional services received by MLLs in public educational settings. Without this data, how can accurate decisions be made about student programming?

Keywords: multilingual learners (MLL), Every Student Succeeds Act, Title III, additive instructional settings, equal access, equity, MLL documentation, data-driven decision making

Current research has determined multilingual learners (MLLs) as one of the most underserved populations of students in the United States educational system today (Fowler & Brown, 2018; Wiseman & Bell, 2021). With the growing population of MLLs (National Center of Educational Statistics [NCES], 2023), quality, research-based decisions for educating these students are needed more than ever before (Wiseman & Bell, 2021). The Title III, Language Instruction for English Learners and Immigrant Students program, from Every Student Succeeds Act, attempts to serve MLLs, but even this federally-mandated accountability program has struggled to provide educational data of Title III students (Wiseman & Bell, 2021). This often means that English language educators lack the necessary assessment data and behavioral data to show student progress in learning and development (Fowler & Brown, 2018; Wiseman & Bell, 2021) and to make educated and appropriate instructional decisions (Dodman et al., 2021). Despite the legislation and drive for equitable education, there is still limited research on documentation for MLLs in general education settings and additive instructional settings (Fowler & Brown, 2018; Wiseman & Bell, 2021). Furthermore, without data evidence, the educational system lacks the ability to differentiate opportunities to learn (OTL) for a diverse group of learners (Kurz, 2018), especially in Title III additive instructional settings (Fowler & Brown, 2018; Wiseman & Bell, 2021).

MLLs have the right to a fair education, including the right to learn and equitable access, despite a linguistic barrier (Education Law Center, 2022). Yet, the racial/ethnic achievement gap is evident in state standardized assessment data, and mitigating the negative racial-ethnic achievement trend is on the minds of countless constituents, state educational agencies, school districts, administrators, teachers, and families (Wiseman & Bell, 2021). To paint a clear picture, the first questions frequently asked are, “What is working well?” and “What could be better?” However, the responses fall short without the existence of enacted MLL data. Data make the perceptual landscape lush (Finn, 2022). While not a new concept, individualized language plans (ILPs) have emerged as a data tool, the “*IEP of multilingual learner programs (MLPs)*,” but the

regulations around these plans have been varied, unclear, or not widespread (Thompson & Rodriguez-Mojica, 2023).

At this stage in the research, MLL documentation is generally defined as the documents compiled and organized from an MLL's educational setting to be used in a meaningful way to guide instruction and create reports on the data collected on the effectiveness for the betterment of the students. While some districts provide vague lists of which documents should be collected in MLL files, I wanted to explore if this document guidance was being followed or if files are missing key components for data-driven decision making (Mandinach et al., 2006). The United States educational system needs better educational documentation, data, and instructional accountability for MLLs (Wiseman & Bell, 2021).

Literature Review

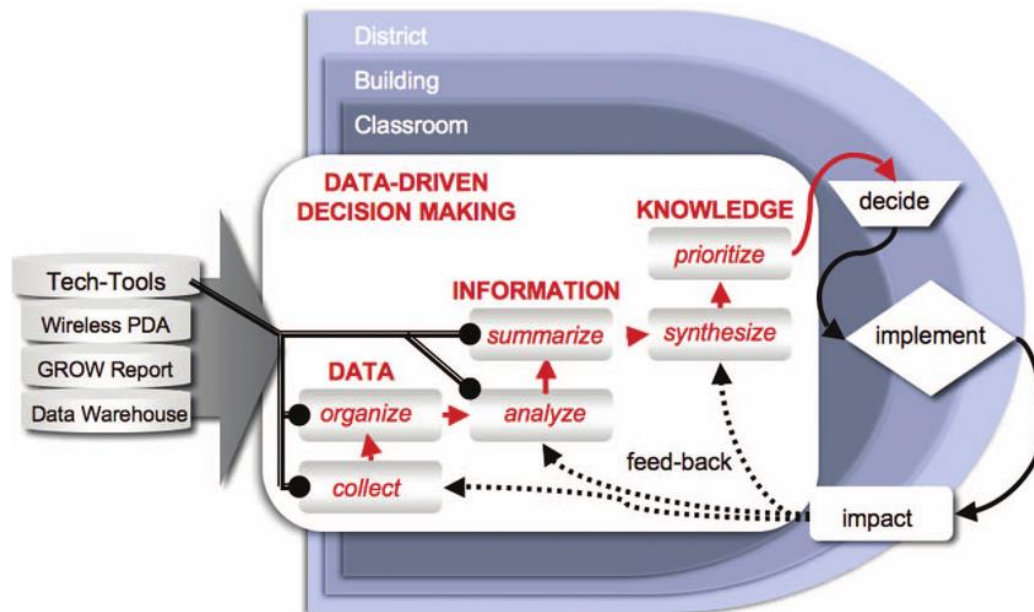
National achievement data are worrisome across the field of education, especially for culturally and linguistically diverse students (Fowler & Brown, 2018). According to Wiseman and Bell (2021), standardized assessments offer the only educational insight available for multilingual learners in most states. On a national level, achievement data demonstrated a significant racial-ethnic achievement gap (Fowler & Brown, 2018). And yet, so little is known regarding the education of multilingual learners, due to the lack of additive instructional servicing data available for this underserved group of students. The achievement gap for culturally, linguistically, and ethnically diverse students has posed a great concern for multiple decades (Beecher & Sweeny, 2008; Fowler & Brown, 2018).

For many decades, traditional methods of data collection have been used to document services provided by MLL educators. The most common form of traditional data collection has been paper-and-pencil methods, such as records of schedules, attendance, and possibly even servicing notes. Some MLL educators have kept minimal evidence documenting MLL service monitoring. In the cases where an educator has kept detailed paper records, their bookshelves are often filled with binders full of pages of notes of servicing data (Leone, 2023). If a district is

audited for funding compliance or an administrator needed information on a student's total servicing time, reporting is going to be incredibly challenging even with the most organized system.

Heiskanen et al. (2019) researched how educators created and used sequential pedagogical documents for children with special educational needs and found four patterns of support documentation: missing, repetitious, disorganized, or explicit. Explicit was the ideal category of documentation. Only 13% of the documents reviewed were explicit examples where "support was evaluated and developed systematically" (Heiskanen et al., 2019, p. 333). Of the support records, 87% were lacking—imprecise, vague, incoherent, or nonexistent, which made it impossible to interpret the student data correctly or trust the analytics determined from the data calculations using these records. I believe this is likely the case with examples of MLL data as well.

Data-driven decision-making (DDDM) is a process of identifying data, collecting it to be analyzed and interpreted, and using it to set goals to improve educational experiences (Mandinach & Schildkamp, 2021a). According to the DDDM conceptual framework in Figure 1, data come from many modes, methods, and sources (Mandinach et al., 2006). The *data* enter as raw, unaltered form and through analysis, *information* is assigned meaning within a context (Mandinach et al., 2006). Lastly, turning data to *knowledge* allows for effective instructional planning and future implications. After the information progresses through these three components (i.e., data, information, and knowledge), decisions are made, implemented, and assessed for impact, which leads to the feedback loop with further information to use in subsequent DDDM processes. Using the DDDM framework fosters a culture of continuous growth focused on student learning compared to a culture of compliance regarding student learning (Dodman et al., 2021). The MLL documentation within student data files is in the *data* section of the DDDM process displayed in Figure 1.

Figure 1*Data-Driven Decision-Making Framework*

Note: Based on information from Mandinach et al., 2006.

Data Literature

Educational data literature is vast. Kurz (2018) addressed the lack of data in student subgroups as “the missing link” (p. 1) between knowledge and quality educational decisions. According to Buzhardt et al. (2020), DDDM is how educators use student data to inform educational decisions, and it is an essential component of a multi-tiered system of support approach, which is driven “from formative progress-monitoring measures of students’ growth in the school curriculum” (p. 75). Meaningful data are imperative, complex (Mandinach & Schildkamp, 2021a; Mandinach & Schildkamp, 2021b), and inform insight that drives decisions that enhance learning (Fernando, 2020). Fowler and Brown (2018) described the intended purpose and use of data:

The purpose of collecting, disaggregating, and consuming data is to better improve teaching and learning practices for students. This cannot be done in a way that does not

take into account the learning needs of students, which is why data should begin to inform the conversations around equitable outcomes for students based on the student's relationship with the teacher, the educational system, and their learning processes. (p. 24)

Data variety make the perceptual landscape lush and are essential to the process of turning data into useful knowledge (Finn, 2022).

According to Fitzpatrick and Margolin (2004), data usually fall into 4 categories: achievement data, demographic data, program data, and perceptual data. Achievement data are the most universal measure when considering data influencing educational policy and decisions (Dodman et al., 2021; Portz & Beauchamp, 2022). Unfortunately, the only universally recognized and required documented MLL educational data used nationally are yearly English language proficiency assessment achievement test scores (Fowler & Brown, 2018). Without adequate and varied data and metrics available, the process of asking questions to guide data-informed decisions cannot occur effectively (Shaked, 2010).

MLL Data Documentation Literature

According to Wiseman and Bell (2021), educational data for MLLs are usually “anecdotal, limited in scope, or related to population size rather than disaggregate-able experiences” (p. 2). Furthermore, language proficiency data are the only educational data available on MLPs and MLLs (Wiseman & Bell, 2021). The lack of empirical, publicly available, systematically collected, disaggregated data makes it impossible to conduct cross-national analyses, limiting policymakers' ability to make equitable, data-driven decisions (Wiseman & Bell, 2021). Accountability structures tangibly increase student scores (Fowler & Brown, 2018). However, the specific academic and linguistic needs of this subgroup have never been identified due to the lack of data (Wiseman & Bell, 2021).

MLL data are centered around a single yearly achievement data score (Fowler & Brown, 2018). A single standardized assessment does not provide enough metrics to demonstrate

progress monitoring or equitable accountability to this underserved population (Fowler & Brown, 2018; Wiseman & Bell, 2021). As such, the question becomes: What is the most effective way to standardize the documentation of the instructional services received by the complex, growing subgroup of MLLs? Over the decades, some traditional documentation methods have been used to document student services (Ruf, 2012). The most common form of traditional documentation is paper-and-pencil methods (Ruf, 2012). Some educators keep very minimal evidence of documentation and MLL service monitoring (Wiseman & Bell, 2021). Traditional documentation methods are archaic, nonuniform, and difficult to transition the data to reports for audits on compliance (Fowler & Brown, 2018).

MLL data files, frequently called cumulative folders, are the documentation center for student data and progress monitoring. According to Law and Eckes (2016), when systemizing a documentation process, a district should decide who the audience will be and how documents will be used. The primary goals of student cumulative folders are to offer a combination of data varieties to show students' strengths and weaknesses for student instructional development and future use by other educators (Law & Eckes, 2016). Lawrence Public Schools (2013) in Lawrence, Massachusetts and the Texas Education Agency (2020) included the following documents in their districts' MLL cumulative folders:

- Home language survey
- Assessment and placement portfolio
- Signed parent notification letter
- Initial entry assessment
- Student schedule and Sheltered English Immersion Program (SEI) placement
(Lawrence Public School only)
- MLL student support plan
- Annual English proficiency scores
- State test scores (with student's success plan if scores need improvement)

While some school districts have developed MLL cumulative folder documentation lists or national directives on MLL, documentations have yet to be found (Fowler & Brown, 2018; Wiseman & Bell, 2021). Cumulative folders are required to be kept and maintained for five years after a student graduates or leaves the school district (Lawrence Public Schools, 2013).

The Teaching English to Speakers of Other Languages (TESOL) International Association is a professional community acknowledged worldwide for ML learning opportunities, research, standards, and advocacy. The TESOL Principles of Exemplary Teaching of English Learners includes both knowledge of students (TESOL, 2023a) and monitoring and assessing English language proficiency growth (TESOL, 2023b). These standards are encouraged to “provide teachers with the knowledge to make informed decisions to improve instruction” (TESOL, 2023c, p. 7). *Principle One: Know Your Learners* encourages educators to obtain data on MLLs linguistic and academic backgrounds (TESOL, 2023a), and *Principle Five: Monitor and Assess Student Language Development* suggests teachers should maintain records to monitor errors, utilize formative assessments, and take a collaborative approach to the shared responsibility of educating MLLs, called School-Wide English Learning (TESOL, 2023b). These principles are best practices for the English language development (ELD) field, but the enactment of these standards has yet to be represented in the ELD literature on data documentation.

A thorough examination of existing research revealed no uniform documentation standards for MLL folders have been discovered (Boyle et al., 2010; Carney, 2020; Wiseman & Bell, 2021). Even though data has proven to be a valuable tool for influencing quality decision-making (Boudett et al., 2015; Ikemoto & Marsh, 2007; Mandinach et al., 2006) and the TESOL International Association identified monitoring and assessing student language development as one of their six principles of exemplary ML teaching (TESOL, 2023c). As of 2023, instructional data collection has rarely occurred in MLPs; where it did, the data lacked explicitness and overall coherence across the field (Fowler & Brown, 2018; Leone, 2023;

Wiseman & Bell, 2021). For this reason, an empirical rationale for the present study exists to examine the contents of MLP data files. Due to the time constraints for this study and my ability to gain permission to access files, I decided, with my administrator's support, to review files in one New Hampshire public school.

Methodology

There has been a growing need for a synchronized mode and method of MLL data collection across education (Leone, 2023). Situated in the grounded theory methodology (Charmaz, 2014), the purpose of this document analysis study was to explore the evidence and quality of MLL data. Due to time constraints and availability of access, in this study I examined records at one New Hampshire school. The findings of this study provided, for this school, insight into what documents MLL files currently include and do not include, and this can help direct future discussions and guidance on what documents MLL folders should include. The results in this study might also generate interest in reviewing the data from other schools in our state and other states.

Research Questions and Hypothesis

The primary research questions that guided this study were:

1. What is the range of formats used for documenting data collection for English as a second language instruction?
2. What is the quality of data collection for English as a second language instructional documentation?

Based on prior research demonstrating disunity in MLL data collection (Leone, 2023), I hypothesized that MLL documentation would lack tools (formats) and precision (quality) for documenting additive instructional scenarios.

Methods

The exploratory qualitative document analysis design (Bowen, 2009; Bretschneider et al., 2017) involves inference based on the formats and quality of data collection for multilingual

learners in additive instructional settings in a New Hampshire public school. The principal investigator (i.e., the author) selected 30 MLL document files to be coded for evidence of progress monitoring. Documents likely found in MLL files include demographic information, program permissions, attendance records, progress monitoring records, instructional data, and assessments. The type of materials used were the focus of the data collection. There was no connection to the student data. The data collection was a one-time action that took approximately 30 minutes for each file. Bowen (2009) described document analysis as a “systematic procedure for reviewing or evaluating documents . . . to elicit meaning, gain understanding, and develop empirical knowledge” (p. 27).

This review followed grounded theory methodology (Charmaz, 2014) to explore the contents of the MLL files. While the field of MLL does not provide specific guidelines for data collection, analyzation, and reporting (Leone, 2023), grounded theory is a research strategy to explore the existing documents on instructional data for learners in MLL programs included in the files starting with a blank slate (Charmaz, 2014). Once the initial list was created, focus coding was used to narrow down and organize the original list of codes. By allowing the data to initially guide the development of the codes, the final data are more closely connected to the codes and hence, the findings.

Participants

The study featured 30 files of MLL administrative records ($n = 30$) from a New Hampshire school. A pool of over 80 potential student files was available, but only 30 were physically chosen. In this way, all documents were chosen based on study compliance of being enrolled as an MLL participant.

Data Collection Instrument

Bowen (2009) explained that document analytics use the process of “finding, selecting, appraising, and synthesizing data contained in documents” (p. 28). The analysis methodology for the format of data present used grounded theory ontology and coding. After this initial list of

codes was created, the second level of coding focused on the format, quantity, and quality of documents collected in the file (Saldaña, 2021).

As MLL files do not currently have uniformity, guidance, or direction (Leone, 2023), the analysis of the quality was modeled after the special education file research of Heiskanen et al. (2019). Heiskanen et al. examined how 172 educational sequential care plans were examined for patterns of descriptions for support measures. The documentation practices were determined to be: missing, repetitious, disorganized, and explicit (Heiskanen et al., 2019). Table 1 displays the definitions for each category.

Table 1

Type of Document Quality

Missing	Description of support were lacking entirely
Repetitious	Illustrates a plan for support; descriptions are brief, nonspecific, and repeated almost identically from one recording to another
Disorganized	Support is described in a precise and unambiguous manner, yet not as a systematic feature as the linguistic features in the other patterns are, as the support can be unambiguous and general
Explicit	Support is evaluated and developed systematically

Data Analysis

The data were organized, cleaned, and sorted into four data sheets: Attendance, Instructional Data, Formative Assessments, and Summative Assessments. Since the expectation in schools usually require all important information to be present in all files of students, my analysis focused on what information was present and what information was not

present. The review of the files showed that all categories of information were missing in some files.

Findings

The following sections outline the findings of the data analysis. Examining the visual representation in Figure 2, the larger the word's depiction, the more frequently that document was in the files. Twenty-seven (90.00%) of the files included WIDA Screener, the tool used to assess whether or not students are EL eligible, and all 30 (100.00%) of the files contained WIDA ACCESS, assessments used to assess EL progress. Two other types of documents found in the files included 19 (63.33%) Individualized Language Plans and 11(36.67%) Designated Accommodations. Additionally, three (10.00%) of the files included progress reports.

Figure 2

Frequency of Document Format



These data indicate that important information was missing in files. These data indicate that the fact that there are no explicit guidelines relating to what information should be in each file has led to missed information that educators should have to make important decisions about EL students. In other words, how can educators make clear and accurate instructional decisions

with incomplete data? For example, 90% of the files reviewed were missing progress report data that must be available for accurate planning for teachers and students.

The data, as displayed in Table 2, give a clear picture of what files in this study contained and what was missing in EL files. The data show that 30 (100.00%) of the files contained WIDA ACCESS as a summative assessment; 27 (90.00%) of the reviewed files had a WIDA SCREENER to determine EL eligibility; 19 (63.33%) of the files contained an Individualized Language Plan; 11 (36.67%) of the files contained designated supports and accommodations; 10.00% of the files contained progress reports.

Table 2

Frequency of Document Formats

	Designated Supports & Accommodations	WIDA SCREENER	WIDA ACCESS	Individualized Language Plan	Progress Report
Present	11	27	30	19	3
%	36.66%	90.00%	100.00%	63.33%	10.00%

When examining the quality of instructional data documents, as displayed in Table 3, they were missing from all 30 (100.00%) MLL files. Conversely, Table 3 also shows that instructional data was explicitly outlined in 18 (60.00%) of the MLL files. Instructional data was explicitly described in the Individualized Language Plans (ILPs), but in examining this document further, there were only a series of goals and instructional group plans. The ILPs did not have an element of enacted data. The other 12 (40.00%) of the MLL documents were missing instructional data. Table 3 also displays the summative assessment documents present in the MLL files. Summative assessment documents were present and explicit in all 30 (100.00%) of MLL files. The WIDA ACCESS language proficiency score reports were the mode of all 30

(100.00%) of the summative assessments. Formative documents were missing in 28 (93.33%) of the files, and in the two files (6.67%) that contained formative data, they were disorganized.

Table 3

Quality of Documents

Document Types	Data Types	Missing	Repetitious	Disorganized	Explicit
Attendance Document	<i>n</i>	30	0	0	0
	%	100.00%	0.00%	0.00%	0.00%
Instructional Data*	<i>n</i>	12	0	0	18
	%	40.00%	0.00%	0.00%	60.00%
Formative Documents	<i>n</i>	28	0	2	0
	%	93.33%	0.00%	6.67%	0.00%
Summative Documents	<i>n</i>	0	0	0	30
	%	0.00%	0.00%	0.00%	100%

Note: *Instructional data contained 0 enacted data.

Interpretations & Recommendations

The data findings highlighted some important interpretive conclusions which can guide recommendations. First, the only document format that was collected frequently and consistently in the folders was summative assessments ($n = 100\%$). Summative assessments included the nationally required annual language proficiency assessment and a language proficiency screener. Summative data is considered achievement data from Fitzpatrick and Margolin's (2004) data categories (achievement data, demographic data, program data, and perceptual data). While achievement data is very influential in decisions of educational policy

(Dodman et al., 2021; Portz & Beauchamp, 2022), the lack of data variety counteracts the recommendations presented in research literature on effective data use (Finn, 2022). The emphasis on more data variety is substantial in the literature (Finn, 2022; Vail, 2022; Wiseman & Bell, 2021), and this study supports the interpretation that a more varied spectrum of MLL data in documentation would be greatly beneficial.

Some directives could be useful in MLL education for greater uniformity, compliance, and accountability. The cumulative folders that were analyzed had a variety of documents, which leads to the conclusion that teachers are unsure which documents should be included in an effective cumulative folder. Teachers should receive professional development (PD) on data efficacy and data-driven decision-making (DDDM) to help them process the importance and usage of data documents. By utilizing quality and specific PD experiences, ELD teachers would likely document and analyze more data (Gesel et al., 2021; Kennedy, 2016), feel greater data efficacy (Dunn et al., 2013), and better use data and findings to inform instruction (Dodman et al., 2023). PD is a highly effective strategy for engaging data practices (Kennedy, 2016; Schnellert, 2020) and would likely have a positive effect if implemented on MLP in New Hampshire.

Consistent with earlier findings of the limited existence of process data in MLL data (Leone, 2023), instructional data was the least common type of data documented in MLPs, missing in 90% of the files. In three of the cumulative folders (10.00%), a progress report was present. Enacted instructional data is documentation of instructional practices that occurred in the past and can be recorded as factual (Kurz, 2018; Rowan et al., 2004). Enacted instructional data documents were missing from all 30 MLL files (100.00%). My review of the data found that cumulative files of older students tended to include more instructional documents and formative documents, meaning that files of older students were more likely to include beneficial documentation. Since this was a small sample, this concept needs more research.

Individualized Language Plans (ILP) were found in 60.00% of the data files outlining a series of

goals and instructional group plans, but these plans do not account for what *actually* happened to teach these goals effectively. As stated, the ILP does not have an element of enacted data. Enacted instructional data could be a missing link in MLL documentation for effective DDDM.

The concept of enacted instructional data documentation is not widespread as best practice yet, as many teachers still consider a lesson plan before instruction to be instructional documentation. I would ask these teachers to consider how often lessons change with minimal notice. According to Rowen et al. (2004), enacted curriculum refers to the actual daily experiential operations of the intended curriculum and the instructional decisions made based on the process. The space of misalignment between the intended curriculum (lesson plans) and the enacted curriculum devalues lesson plans as instruction documentation.

Finn (2022) suggested the importance of an effective data system in educational systems and the reluctance of some educators who view data as the means to results-based accountability, which was described by educators as “embarrassing, punitive, and a rejection of professionalism” (p. 13), and not a ripe environment for quality DDDM. However, this mindset is inconsistent with the present findings and research literature, and more specific data directives might be one answer to increasing the documentation of data in MLP. Based on these findings, I synopsise with the following recommendations:

- MLL documentation needs to be varied and inclusive of instructional process data
- Enacted instructional documentation (e.g., progress monitoring, enacted instructional progress) is a useful component of a cumulative folder and could be used more regularly and consistently
- Professional Development could assist with teachers’ data efficacy for better documentation and processing

Conclusions

This qualitative document analysis study explored the MLL documentation in a New

Hampshire public school. The findings from this study begin the exploration into understanding the types of MLL data documentation that exist and the quality of this documentation. The compilation of the present findings and research literature provides a cross-sectional snapshot of the MLL documentation practices of ELD educators in New Hampshire and evidence of the need for richer data documentation in the MLL subgroup (Fowler & Brown, 2018; Garver, 2022; Wiseman & Bell, 2021). With more professional development on documentation and data literacy, educators and administrators can: (a) gain great insight by examining their current data collection and analyzation practices for MLLs in their educational care, (b) consider the findings of the present study to determine the importance of documentation for MLP and use this to improve current practices and increase accountability, and (c) consider creating a norm for quantity and quality of documentation in their current practices. To reach these goals, future research on ELD data collection and analyzation across the United States, the uniformity of MLP documentation data practices, and the influence of Federal ESSA Title III programming, should be completed.

Further study with a larger participant pool within the MLL population would benefit the research literature on data collection practices in the MLL field. However, from this relatively small sampling, conclusions can already be detected about the inconsistency of data documentation within MLL files. Not only would further research prove of high worth, but directives on the national or state level would also bring clarity to the benefits and expectations around data collection within the MLL field. Considering the literature regarding MLL cumulative folder contents (Law & Eckes, 2016; Lawrence Public Schools, 2013; Texas Education Agency, 2020) and ELD educator reports of collecting data more frequently than suggested by this research (Leone, 2023), there is evidence that the lack of uniformity in MLP data practices greatly affects the limited use of data documentation in the field.

Based on the findings from the present study, I can affirm three recommendations to improve MLL documentation. First, MLL documentation needs to be varied and inclusive of

instructional process data. More specific data directives from educational leaders might be one answer to increasing the documentation of data in MLP. Namvar and Intezari (2021) found that data documentation too often lacked explicitness. Vail (2022), Garver (2022), and Finn (2022) reported that local education agencies and state education agencies failed to provide direction on DDDM. Second, enacted instructional documentation (e.g., progress monitoring, enacted instructional progress) is a useful component of a cumulative folder and should be used more regularly and consistently in MLP documentation. Third, PD could assist with teachers' data efficacy for better documentation, as research shows that PD experiences on MLL data documentation were extremely limited (Leone, 2023).

References

- Beecher, M., & Sweeney, S. M. (2008). Closing the achievement gap with curriculum enrichment and differentiation: One school's story. *Journal of Advanced Academics*, 9(3), 502–530. <https://doi.org/10.4219/jaa-2008-815>
- Boudett, K. P., City, E. A., & Murnane, R. J. (2015). *Data wise: A step-by-step guide to using assessment results to improve teaching and learning*. Harvard Education Press.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40. <http://dx.doi.org/10.3316/QRJ0902027>
- Boyle, A., Taylor, J., Hurlburt, S., & Soga, K. (2010). Title III accountability: Behind the numbers. <https://files.eric.ed.gov/fulltext/ED511982.pdf>
- Bretschneider, P., Cirilli, S., Jones, T., Lynch, S., & Wilson, N. (2017). Document review as a qualitative research data collection method for teacher research. In Sage research methods cases part 2. SAGE Publications, Ltd. <https://doi.org/10.4135/9781473957435>
- Buzhardt, J., Greenwood, C. R., Jia, F., Walker, D., Schneider, N., Larson, A. L., Valdovinos, M., & McConnell, S. R. (2020). Technology to guide data-driven intervention decisions: Effects on language growth of young children at risk for language delay. *Exceptional Children*, 87(1), 74–91. <https://doi.org/10.1177/0014402920938003>
- Carney, T. (2020). FY21 program assurances. New Hampshire Department of Education. <https://www.education.nh.gov/sites/g/files/ehbemt326/files/inline-documents/2020-04/school-district-general-assurances-fy21.pdf>
- Charmaz, K. (2014). *Constructing grounded theory*. Sage.
- Dodman, S. L., Swalwell, K., DeMulder, E. K., View, J. L., & Stribling, S. M. (2021). Critical data-driven decision making: A conceptual model of data use for equity. *Teaching and Teacher Education*, 99. <https://doi.org/10.1016/j.tate.2020.103272>

- Dodman, S. L., DeMulder, E. K., View, J. L., Stribling, S. M., & Brusseau, R. (2023, January). "I knew it was a problem before, but did I really?": Engaging teachers in data use for equity. *Journal of Educational Change*, 24,995–1023. <https://doi.org/10.1007/s10833-022-09477-z>
- Dunn, K. E., Airola, D. T., Lo, W.-J., & Garrison, M. (2013). Becoming data driven: The influence of teachers' sense of efficacy on concerns related to data-driven decision making. *The Journal of Experimental Education*, 81(2), 222–241. <https://doi.org/10.1080/00220973.2012.699899>
- Education Law Center, (2022). Making the grade 2022: How fair is school funding in your state? <https://edlawcenter.org/research/making-the-grade-2022/?ref=primaryfocus.tv>
- Finn, C. E., Jr. (2022). School accountability: Yesterday, today, and tomorrow. *PHI DELTA KAPPAN*, 104(3), 12–17. <https://doi.org.ezproxy.snhu.edu/10.1177/00317217221136588>
- Fitzpatrick, M., & Margolin, J. (2004). Using data to guide school improvement. *North Central Regional Educational Laboratory*, 7, 1–14. <https://files.eric.ed.gov/fulltext/ED518630.pdf>
- Fernando, P. R. R. (2020). Improving the quality of education system using Data Science Technologies: Survey. *2020 5th International Conference on Innovative Technologies in Intelligent Systems and Industrial Applications (CITISIA)*, Sydney, Australia, 2020, pp. 1–6. <https://doi.org/10.1109/CITISIA50690.2020.9371793>
- Fowler, D. J., & Brown, K. (2018). Data-driven decisions: Using equity theory to highlight implications for underserved students. *AASA Journal of Scholarship & Practice*, 14(4), 18–28. <https://www.aasa.org/resources/resource/data-driven-decisions-using-equity-theory-to-highlight-implications-for-underserved-students>
- Garver, R. (2022). For some and for all: Subgroup entitlement policies and daily opportunity provision in segregated schools. *American Educational Research Journal*, 59(3), 574–609. <https://doi.org/10.3102/00028312221079302>

- Gesel, S. A., LeJeune, L. M., Chow, J. C., Sinclair, A. C., & Lemons, C. J. (2021). A meta-analysis of the impact of professional development on teachers' knowledge, skill, and self-efficacy in data-based decision-making. *Journal of Learning Disabilities, 54*(4), 269–283. <https://doi.org/10.1177/0022219420970196>
- Heiskanen, N., Alasuutari, M., & Vehkakoski, T. (2019). Recording support measures in the sequential pedagogical documents of children with special educational needs. *Journal of Early Intervention, 41*(4), 321–339. <https://doi.org/10.1177/1053815119854997>
- Ikemoto, G. S. & Marsh, J. A. (2007). Chapter 5: Cutting through the “data-driven” mantra: Different conceptions of data-driven decision making. *Yearbook of the National Society for the Study of Education, 106*(1), 105–131. <https://doi.org/10.1111/j.1744-7984.2007.00099>
- Kennedy, M. M. (2016). How does professional development improve teaching? *Review of Educational Research, 86*(4), 945–980. <https://doi.org/10.3102/0034654315626800>
- Kurz, A. (2018). Confronting the known unknown: How the concept of opportunity to learn can advance tier 1 instruction. In Elliott, S. N. et al. (eds.), *Handbook of accessible instruction and testing practices*, Springer International Publishing. http://doi.org/10.1007/978-3-319-71126-3_9
- Law, B., & Eckes, M. (2016). *Creating an effective data reporting system for Ells*. Colorín Colorado. <https://www.colorincolorado.org/article/creating-effective-data-reporting-system-ells>
- Lawrence Public Schools. (2013). *Procedures for maintaining cumulative folders/record card*. <https://www.aclum.org/sites/default/files/wp-content/uploads/2015/10/Cumulative-Record-Folder-Maintenance.pdf>

- Leone, E. L. (2023). *The exploration of data collection and analyzation by English language development educators in New Hampshire* (Order No. 30418737) [Doctoral dissertation, Southern New Hampshire University]. Academic Archive, Southern New Hampshire University. <https://academicarchive.snhu.edu/server/api/core/bitstreams/9052b27f-dbd2-4cf5-89b1-516d6b6acbc1/content>
- Mandinach, E. B., Honey, M., & Light, D. (2006). A theoretical framework for data-driven decision making. In annual meeting of the American Educational Research Association. https://cct.edc.org/sites/cct.edc.org/files/publications/DataFrame_AERA06.pdf
- Mandinach, E. B., & Schildkamp, K. (2021a). Misconceptions about data-based decision making in education: An exploration of the literature. *Studies in educational evaluation*, 69, [100842]. <https://doi.org/10.1016/j.stueduc.2020.100842>
- Mandinach, E. B., & Schildkamp, K. (2021b). The complexity of data-based decision making: An introduction to the special issue. *Studies in Educational Evaluation*, 69, [100906]. <https://doi.org/10.1016/j.stueduc.2020.100906>
- Namvar, M., & Intezari, A. (2021). Wise data-driven decision-making. In: Dennehy, D., Griva, A., Pouloudi, N., Dwivedi, Y.K., Pappas, I., Mäntymäki, M. (eds) *Responsible AI and analytics for an ethical and inclusive digitized society. I3E 2021. Lecture Notes in Computer Science*, 12896. Springer, Cham. https://doi.org/10.1007/978-3-030-85447-8_10
- National Center for Education Statistics (NCES). (2023). English learners in public schools. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. <https://nces.ed.gov/programs/coe/indicator/cgf>
- Portz, J., & Beauchamp, N. (2022). Educational accountability and state ESSA plans. *Educational Policy*, 36(3), 717–747. <https://doi.org/10.1177/0895904820917364>

- Rowan, B., Camburn, E., & Correnti, R. (2004). Using teacher logs to measure the enacted curriculum: A study of literacy teaching in third-grade classrooms. *Elementary School Journal*, 105(1), 75–101. <https://doi.org/10.1086/428803>
- Ruf, H. D. (2012). *A comparative study on electronic versus traditional data collection in a special education setting* (Order No. 3525825). [Dissertation. Nove Southeastern University]. ProQuest Dissertations & Theses Global.
- Saldaña, J. (2021). *The coding manual for qualitative researchers*. SAGE Publications
- Schnellert, L. (2020). *Professional learning networks: Facilitating transformation in diverse contexts with equity-seeking communities*. Emerald Publishing Limited.
- Shaked, D. (2010). A strength-based approach to metrics, scorecards, and performance reviews. *AI Practitioner*, 12(3), 50–55. <https://www.almond-insight.com/wp-content/uploads/2021/03/Strength-Based-Approachto-metrics.pdf>
- Teaching English to Speakers of Other Languages (TESOL).** (2023a). *Principle 1: Know your learners*. TESOL. <https://www.the6principles.org/the-principles/principle-1/>
- Teaching English to Speakers of Other Languages (TESOL).** (2023b). *Principle 5: Monitor and assess student language development*. TESOL. <https://www.the6principles.org/the-principles/principle-5/>
- Teaching English to Speakers of Other Languages (TESOL).** (2023c). *What are the 6 principles?* TESOL. <https://www.the6principles.org/about/>
- Texas Education Agency. (2020). *English learner cumulative folder documentation checklist*. Texas Education Agency. <https://www.txel.org/media/oqpjcoqc/english-learner-cumulative-folder-documentation-checklist.pdf>
- Thompson, K. D., & Rodriguez-Mojica, C. (2022). Individualized language plans: A potential tool for collaboration to support multilingual students. *Journal of Education for Students Placed at Risk (JESPAR)*, 28(1), 97–121. <https://doi.org/10.1080/10824669.2022.2123330>

Vail, K. (2022). What's beyond the pandemic accountability freeze? *Phi Delta Kappans*, 104(3), 30–35. <https://doi-org.ezproxy.snhu.edu/10.1177/00317217221136596>

Wiseman, A. W., & Bell, J. C. (2021). Education without evidence: Gaps in data availability for refugee, asylee, and humanitarian migrant students in US schools. *Research in Education*, 1. <https://doi-org.ezproxy.snhu.edu/10.1177/00345237211034885>