A PHENOMENOLOGICAL STUDY OF TEACHER EXPERIENCES PERSONALIZING LEARNING IN ENGLISH LANGUAGE ARTS

by

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Liberty University

A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree

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Abstract

The purpose of this transcendental phenomenological study was to understand the lived experiences of secondary English language arts teachers implementing personalized learning in Southeastern Pennsylvania. Teachers who personalize learning must currently determine their own method of doing so without adequate research about the process to inform their pedagogy. The theory guiding this study was Vygotsky's theory on social development, as it highlights the necessity of social interaction to help students stay within the zone of proximal development even in a personalized learning framework. The ten participants for this study were selected by purposive sampling, and data were collected through semi-structured interviews, non-participant observations, and document analysis. Data analysis was conducted to organize information into themes. The four main themes that emerged from the data analysis process were: a) student engagement, b) time and resources, c) positive relationships, and d) multitasking and balancing.

Keywords: personalized learning, social interaction, English language arts, instructional technology

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Dedication

I dedicate this dissertation to my parents who taught me a love of learning and striving, and to my children and husband for whom I sacrificed my time and attention to make this happen.

Acknowledgments

I must acknowledge the aid and advice of my dissertation chair, Dr. Sabine Branch, in making this dissertation come to reality.

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List of Abbreviations

English language arts (ELA)

Central Research Question (CRQ)

Common Core State Standards (CCSS)

Competency-based assessment (CBA)

Learner Profile (LP)

Modern Language Association (MLA)

National Center for Education Statistics (NCES)

Pennsylvania Department of Education (PDE)

Personalized Learning (PL)

Personalized Learning Plan (PLP)

Project-based learning (PBL)

Social development theory (SDT)

Sub-Question 1 (SQ1)

Sub-Question 2 (SQ2)

Sub-Question 3 (SQ3)

Team-based learning (TBL)

CHAPTER ONE: INTRODUCTION

Overview

The purpose of this transcendental phenomenological study was to understand the lived experiences of secondary English language arts (ELA) teachers implementing personalized learning (PL) in Southeastern Pennsylvania. Personalization outside of education, the customization of experiences based on the preferences of the customer, is now a normal part of society such as when shopping, watching television, and interacting online (Walkington & Bernacki, 2020). As an educational framework, PL is the act of tailoring what, how, when, and even where students learn to their individual needs, interests, and skills (Alamri et al., 2020; Childress & Benson, 2014; Bingham, 2019; Bernacki & Walkington, 2017). When implemented well, PL may increase growth (Basham et al., 2016), achievement (Alsobhi & Alyoubi, 2019), motivation (Baye et al., 2019) autonomy (Alamri et al., 2020) and more. However, Shemshack and Spector (2021) found that implementing PL well is one of the biggest challenges of modern education because of the wide variety in what PL looks like and how to use the framework in individual school districts. Therefore, teachers are currently forced to implement PL without proper support or research into how to personalize learning for their subject area (Schmid et al., 2022), such as secondary ELA which requires additional peer socialization (Costigan, 2018); unfortunately, implementing PL typically decreases peer interaction and socialization (DeMink-Carthew & Olofson, 2020). Chapter One offers a brief overview of the historical, social, and theoretical contexts for the implementation challenges of personalizing learning without sacrificing social interaction for high school ELA. Chapter One also includes the problem statement, the purpose of the study, the significance of the study, and the research questions guiding this study.

Background

Recent educational pundits tout PL as an antidote to the "one-size-fits-all" method of education for standardized testing and industrial-era norms without providing adequate direction about how to personalize learning without sacrificing social interaction (Zhang, Basham, & Yang, 2020, p. 12). PL refers to an educational framework where teachers allow students to move at individualized paces through content using the methods which help each student individually such as by providing playlists of instructional resources for children to choose how they learn new material or tracking mastery of skills at the child's own pace through personalized learning plans (PLPs) (McCarthy et al., 2020). Some limited research on PL shows that using PL has demonstrated a statistically significant effect on learning outcomes (Major et al., 2021). For example, researchers studying five different districts of PL schools in 2016 found an increase of 130% in reading for 36,000 K-12 students (Education Elements, 2017). Similarly, McCarthy et al. (2020) found statistically significant improvements in language usage and reading on MAP assessments when they compared students in PL framework to those in a traditional school. While researchers found that personalizing learning has positive effects on some aspects of student learning (Alamri et al., 2020; Alsobhi & Alyoubi, 2019, Basham et al., 2016; Walkington & Bernacki, 2020), challenges to implementation result in negative effects of PL outcomes (Bernacki et al., 2021; Pane et al., 2015). Implementation of PL varies widely from a complete redesign of entire school districts to small shifts within one aspect of a course (Lee et al., 2018; Mötteli et al., 2021; U.S. Department of Education, 2017). A series of studies about the application of PL in schools commissioned by the Bill & Melinda Gates Foundation (Pane et al., 2015, 2017; RAND Corporation, 2014) found considerable variety in the schools' PL implementation with few situations for students to choose their own instructional materials or

even the topic they studied, which is often the theoretical goal of PL. Most researchers have focused on the implementation of PL frameworks in science, technology, engineering, or mathematics subjects (Bernacki et al., 2021), but the practitioners of discussion-heavy courses such as ELA face additional challenges to personalizing learning (Costigan, 2018). More research about the process of personalizing learning is essential to successful implementation in secondary ELA.

The advances in technology in the 20th and 21st centuries have allowed PL theories to grow and gain popularity (Kallio & Halverson, 2020). Teachers must now make critical decisions about the kinds of strategies, resources, and technology they use in their classrooms to reach every learner, in every lesson (Porath & Hagerman, 2021). Quality implementation of PL has lagged because research has not kept up with the pace of new initiatives (Shemshack & Spector, 2020). Faced with directives to increase personalization and armed with a dearth of research about implementing the learning framework well, many teachers struggle to maintain rigor and quality instruction in a PL setting (Bernacki et al., 2021). The lack of clarity around PL implementation in the classroom includes the extent to which teachers individualize the educational experience and thus isolate students from one another without social interaction (Alamri et al., 2020; DeMink-Carthew & Netcoh, 2019; DeMink-Carthew & Olofson, 2020). Government policy makers and educational technologists have had an interest in PL for decades because they believe it will increase test scores for previously unengaged and unmotivated students since PL pairs content with individual interests (Shemshack & Spector, 2020), but not enough research has uncovered how teachers are working to meet all the needs of individuals, including the emotional and social needs, in actual classrooms (Bernacki et al., 2021; Mötteli et al., 2021; Shemshack & Spector, 2020). The following sections explore the historical, social, and theoretical aspects of the challenges and experiences of teachers working to personalize learning.

Historical Context

PL in various forms has existed around the country for decades (Brass & Lynch, 2020). The idea of systematically tailoring instruction for each student began with Sidney Pressey's teaching machines in 1926 and then B.F. Skinner's use of teaching machines to personalize learning in 1958 (Brass & Lynch, 2020). These researchers believed that technology would allow teachers to automate learning to save time for the teacher who was not able to consistent tailor teaching and assessment for each student (Brass & Lynch, 2020). Many of these early attempts at personalization using technology were based on philosophies of behaviorist psychologists such as Thorndike who pushed the potential for drill and practice to increase learning (Brass & Lynch, 2020). Critics of contemporary PL highlight the overreliance on behaviorist principles such as the use of algorithms as a downside of PL even now (Herold, 2017). Educational theorists who explored PL without the influence of behaviorist philosophies have long considered each child unique (Major et al., 2021). Even in the early 20th century many progressive educational philosophers such as Dewey were discussing the merits of considering each student as an individual (Major et al., 2021). While many early attempts to personalize learning were based on technological advances, not all methods were (McCarthy et al., 2020). Bloom advocated for oneto-one teaching as the ideal learning environment in 1984 with personalized tutoring (McCarthy et al., 2020). Many early forms of PL occurred when tutors personalized instruction for their individual tutees (McCarthy et al., 2020; McHugh et al., 2020).

While personalized tutoring does reach each child individually, it is not always feasible within the constraints of a classroom setting. Dewey's (1915) progressive era emphasis on experiential learning in social contexts likewise highlighted the theoretical underpinnings of PL

without the use of technology and is accessible such as through authentic, collaborative projects. Modern conceptualizations of PL do include technology as a critical component to able to tailor the learning experience for each student (Lee et al., 2018; Lee et al., 2021; Schmid & Petko, 2019). Contemporary researchers and theorists of PL include individuals from organizations such as Pearson Success Net, the Gates Foundation, the Bill & Melinda Gates Foundation, the U.S. Department of Education, and many more (Brash & Lynch, 2020). As the quality of educational technology improves, teachers increasingly use technological resources to customize instruction, activities, and assessments for individual students through personalization (DeMink-Carthew & Netcoh, 2019; Kallio & Halverson, 2020). Many contemporary researchers are exploring how teachers use this technology to personalize learning and teach children to use it themselves (Alsobhi & Alyoubi, 2019; Kallio & Halverson, 2020; Lee et al., 2018). While conceptions of individualization have persisted for decades, the average teacher in America has exercised authority and control over the content, activities, pacing, and even students themselves (Bishop et al., 2020). Instead of catering each activity to each student's needs, teachers have differentiated their assessments or other facets of the curriculum for individual students with learning disabilities on an as needed basis (Tomlinson, 2017). These practices certainly help the students they are differentiating for, but teachers now have the opportunity to differentiate even further.

Government officials from the U.S. Department of Education have passed initiatives to personalize learning based on new educational technology, such as the Every Student Succeeds Act of 2015, the National Education Technology Plan of 2016 developed by the U.S. Department of Education, and the Race to the Top initiative of 2015. These officials have encouraged school districts to personalize learning with the hope of improving test scores, engaging students, and

creating more capable citizens in these initiatives (Basham et al., 2016; Bishop et al., 2020; McCarthy et al., 2020). For example, the Race to the Top-District competition (2015) awarded over \$500 million in grant funding for school districts to transition to PL environments (Bishop et al., 2020), and 39 states referenced PL to adhere to the Every Student Succeeds Act (2015) (KnowledgeWorks, 2018). School administrators have worked to follow these initiatives through the use of educational technology to advocate for widespread personalization within their districts (Major et al., 2021), and individual classrooms (Pardo et al., 2019). Therefore, many school districts and even entire states are now exploring personalization to increase student success, such as Vermont, Rhode Island, and Massachusetts (Bishop et al., 2020). In fact, Zhang, Yang, and Carter (2020) found that government officials for 33 states in the United States included guidance or regulations about PL in schools in their educational state initiatives, but not clear directives about operationalizing it. For example, the Arkansas Department of Education rewrote their visions and goals for the Every Student Succeeds Act of 2015 to achieve studentfocused education where each student will develop individual competencies and reach personal individual growth (KnowledgeWorks, 2018). The districts of Arkansas then had to determine how to achieve those goals, which means the teachers themselves had to use the methodology in their classrooms while the research on PL is still in its infancy. Officials offered districts implementation aid primarily through online professional development and micro-credentials (Zhang, Yang, & Carter, 2020). Contemporary researchers continue to work towards thorough understandings around PL to better define PL, understand the evidence-based practices that will improve personalized learning, and understand the effects of PL on students and teachers (Bernacki et al., 2021; Zhang, Yang, & Carter, 2020). Herold (2019) explains that the school districts using the term PL have not uniformly defined it in the same way nor shared an

understanding of how to implement PL. This nascent research by no means provides enough clarification about how to operationalize and implement personalize learning effectively (Zhang, Yang, & Carter, 2020), but administrators and government officials are already tasking teachers to personalize learning regardless (Bernacki et al., 2021). Teachers must currently figure out how to personalize learning without appropriate research into the best methods to use in their classrooms, how to introduce them, which technology to use, how to monitor progress, how to involve stakeholders, and much more.

Social Context

As more districts and states support the increased efforts of personalization, the professionals working to personalize their content need to base their decisions on research. Policymakers and government officials working to direct the best initiatives to improve learning must work to understand the experiences of teachers as they work to implement PL in the real world (Schmid et al., 2022; Shemshack & Spector, 2020). These policymakers have not been able to consult quality, empirical research about how to define and implement PL well because it is still a developing concept; therefore, they have not provided clarity to administrators nor teachers who actually make the daily decisions to personalize learning (Bernacki et al., 2021; Kallio & Halverson, 2020; McHugh et al., 2020). Thus, teachers who strive to provide a personalized educational experience are affected by the problem of a lack of understanding about what PL is and how to implement it well (Kallio & Halverson, 2020). Also, individuals who provide professional development or allocate resources and direction for teachers must also be aware of what PL in the real-world entails (Kallio & Halverson, 2020). Additionally, all students are affected by the problem of lack of clarity about PL implementation in that teachers should be providing the correct balance of personalized educational content and assignments as well as

social interaction and class community, and they likewise need to learn how to work in this different method of learning (Kallio & Halverson, 2020). Additionally, student success in the real-world hinges on successful implementation of PL because if teachers no longer use whole group instruction to deliver quality content to all students and instead offer online options for students to choose from, they cannot be sure how each child experienced the information. When students are all working on individual projects at their own pace and in their own way, teachers have a hard time verifying they are using accurate information about their unique content at all times or even are on task at all times (Bishop et al., 2020). Teachers must keep track of all the types of projects, variety of content, student interests and abilities and more for the students in their care at all times. If students are allowed to continually choose the easiest learning options where they put forth the least amount of effort and do the same type of project over and over, they will not master a variety of skills to use in the real world.

Since 2008, the number of articles highlighting research about PL has increased significantly (Shemshack & Spector, 2020). Because PL has increased in popularity in recent years (Bishop et al., 2020; McHugh et al., 2020), administrators are tasking more teachers than ever to customize learning using quality teaching strategies and resources (Mötteli et al., 2021; Schmid et al., 2022). The decisions that teachers make about personalizing learning should thus have research to support them (Bernacki et al., 2021; Walkington & Bernacki, 2021). However, little research on PL focuses on the experiences of teachers as they strive to personalize learning well by including a variety of activities to promote individual efforts and meaningful interaction (DeMink-Carthew & Olofson, 2020), such as in an ELA classroom. Teachers are therefore trying to implement a learning framework without adequate preparation, such as the knowledge about how individual learning preferences affect learning or how to structure instructional design

elements to personalize tasks (Bernacki et al., 2021). Even beyond education, personalization in marketing, engineering, technology, and many other facets of society continue to grow (Bernacki et al, 2021), and those working to make the decisions about personalization should be able to understand the experience of implementing it.

Theoretical Context

The nascent theories behind PL are also still evolving. For example, if learners feel more motivated when they make their own choices about learning (Deci & Ryan, 2000), then what kinds of choices are most effective to offer and how should teachers facilitate those choices? And if students need to construct their own knowledge for every topic in every field (Bruner, 1966), how should teachers facilitate that construction? Most educators agree that every student is unique and should be treated as such (National Forum on Educational Statistics, 2019; Twombly, 2014). Researchers have not uncovered a universal way to deal with the uniqueness of each child, however (Twombly, 2014). To research PL, researchers have used many different theoretical lenses through which to understand the process of improving learning and engagement for individual students (i.e., Alamri et al., 2020; Bingham, 2019; DeMink-Carthew & Olofson, 2020; LeGeros et al., 2022). Researchers studying personalization have based their work on established theories such as Bruner's discovery learning and constructivism (Alamri et al., 2020; Costello, 2017; Lee et al., 2018), self-determination theory (Alamri et al., 2020; DeMink-Carthew & Olofson, 2020), Bloom's mastery learning (Bingham, 2019; Lee et al., 2018), ideas of self-efficacy from Bandura (Elstad & Christophersen, 2017; LeGeros et al., 2022), and the work of Vygotsky (Alamri et al., 2020; Erbil, 2020). Of these theories, one of the more popular theoretical lenses through which to view PL is self-determination theory (Alamri et al., 2020; Bernacki et al., 2021; DeMink-Carthew & Olofson, 2020). Deci and Ryan (2000)

wrote about the self-determination theory as based on the idea that all learners are autonomous and therefore feel motivated from the ability to make choices, that all learners thrive when they feel competent, and that all learners crave relatedness. In other words, researchers ground their studies in PL on the theories around all learners having individual interests, abilities, and motivations.

The recent research findings about personalization highlight developing theories regarding many aspects of personalizing learning. The implementation of PL in individual classrooms, schools, or districts takes purposeful efforts to enact successfully (DeMink-Carthew & Netcoh, 2019; Strekalova-Hughes et al., 2021; Zhang, Basham, & Yang, 2020). Administrators must get educator buy in to successfully employ school-wide personalization (Kallio & Halverson, 2020). During and after initial implementation, educators working to personalize learning must decide which components or aspects of PL they will ground their policy changes on (Alamri et al., 2020; Lee et al., 2021; McHugh et al, 2020). Educators may use components such as PLPs, learner profiles (LPs), competency-based assessments (CBA) and authentic assessments, problem-based learning (PBL), and technology to provide a personalized educational experience (McCarthy et al., 2020). An ever-growing volume of educational theory about the relationship of PL and technology attempts to help focus efforts on the kinds of technology and technological strategies which may prove effective for learning (Alsobhi & Alyoubi, 2019; Brown & Pederson, 2020; Lee et al., 2021). Some researchers add to theories behind PL by offering criticisms of the effectiveness or other aspects of PL (Dishon, 2017; Herold, 2017; Horn, 2017; Tomlinson, 2017). Studies examining the lived experiences of teachers and students participating in PL in the real-world help to see how these developing theories play out in actual educational environments (DeMink-Carthew & Olofson, 2020;

McCarthy et al., 2020; Nagle & Taylor, 2017; Netcoh & Bishop, 2017). Researchers also work to understand the possible effects of PL such as a change in engagement (Bernacki & Walkington, 2018), autonomy and agency (McHugh et al., 2020), self-efficacy (Zhang, Yang, & Carter, 2020), motivation (Bernacki & Walkington, 2018), culture (Sarkar Arani et al., 2019; Strekalova-Hughes et al., 2021), or many other facets of education. This body of research continues to grow and evolve in order to help teachers facilitate educational strategies that actually help students to learn, build relationships, build autonomy, and improve as individuals.

Problem Statement

The problem is ill-prepared secondary ELA teachers negatively affect students' futures by implementing PL without adequate training and preparation (Shemshack & Spector, 2021). PL continues to grow in popularity (Bingham, 2017; McHugh et al., 2020) because it stems from a belief that all students have the capacity to learn when supplied with adequate resources, such as technology, and individualized considerations (Major et al., 2021). PL is a student-centered approach to education that empowers learners to become active participants in their own education to master content and skills, but most definitions of PL do not mention social interaction or specific content areas (Alamri et al., 2020; DeMink-Carthew & Netcoh, 2019; LeGeros et al., 2022). However, students need both personalized support and social interaction for successful learning to occur (Vygotsky, 1978). Because ELA, especially at the high school level, is more focused on social interaction than other content areas such as mathematics, incorporating PL may be more nuanced than existing studies portray (Alston et al., 2018). Working to understand the experiences that teachers go through when personalizing learning to appropriately challenge and engage each student in the classroom while simultaneously maintaining the social interactions inherent in the skills of reading, writing, and speaking

(Pennsylvania Department of Education (PDE), 2014) is important for other ELA teachers and those wanting to balance community through social interaction and personalized instruction. The problem of a lack of clear research on what ELA teachers are doing to personalize learning in their classrooms forces all ELA teachers tasked with personalizing learning to come up with their own method of implementation, which is challenging and may negatively impact PL (Mötteli et al., 2021) and learning outcomes which rely on quality instruction (Schmid et al., 2022). How to implement PL well remains as one of the most pressing issues in modern education (Shemshack & Spector, 2020). Practitioners and policymakers must base their decisions on research (Shemshack & Spector, 2020), and that research should help explain the experiences of teachers as they structure and implement PL in ELA.

Purpose Statement

The purpose of this transcendental phenomenological study was to understand the lived experiences of secondary English language arts teachers implementing PL in Southeastern Pennsylvania. At this stage in the research, PL was defined as a student-centered approach to education that empowers learners to become active participants in the learning process to master essential standards and skills (Alamri et al., 2020; DeMink-Carthew & Netcoh, 2019; LeGeros et al., 2022; Tomlinson, 2017). This study rested upon Vygotsky's (1978) SDT, which highlights the interplay between cultural and societal tools and communication and outlines several important concepts regarding learning, including the importance of social interaction, the more knowledgeable other, and the zone of proximal development.

Significance of the Study

The findings from this study may offer insight to practitioners, administrators, and policy makers in the field of education. Education reform is an important area of consideration so that

practitioners may improve their craft as responsible professionals (Zhang, Basham, & Yang, 2020). Understanding the experiences of teachers helps other teachers as well as administrators and policy makers to make decisions based on real situations (Walkington & Bernacki, 2020). This study has theoretical, empirical, and practical significance for education.

Theoretical Significance

This study contributed to the theoretical and conceptual knowledge of PL by exploring the challenges teachers face by deciding the level at which to personalize learning. All teachers consider the individual differences and needs of their students and make decisions upon that information, even if they do not think critically about this process (Tomlinson, 2017). Therefore, because researchers critique PL for not allowing enough social interaction (Alamri et al., 2020; DeMink-Carthew & Olofson, 2020), the researcher explored the ways teachers facilitate interaction within PL in ELA classrooms. This phenomenological study also contributed to theories about ELA and the experiences and strategies of teachers within that field. By considering this study through the lens of the social-development theory (Vygotsky, 1978), educational stakeholders may gain additional theoretical significance for interpreting PL in a framework of social interaction such as through using a zone of proximal development, more knowledgeable other, and meaningful interaction for learning. Teachers should be able to ground their pedagogical decisions on theory, but how those existing theories, such as SDT, inform new educational initiatives must be explored. SDT is significant because teachers use it as a theoretical framework to challenge students at appropriate levels and in socially relevant ways, which they should also do in PL.

Empirical Significance

Empirically, this study was similar to other qualitative studies that describe the experiences of teachers attempting to personalize learning for their students (DeMink-Carthew & Olofson, 2020; Nagle & Taylor, 2017; Netcoh & Bishop, 2017). However, unlike those studies that describe what personalization in general, this study focused on the experiences of ELA teachers at the secondary level as they incorporated meaningful interaction, which is crucial to ELA standards (PDE, 2014), within a PL framework. The researcher described what the participants of this transcendental phenomenological study did to personalize learning in the real world and asked teachers to reflect on what was working as well as the struggles they faced in ELA. Additionally, while much research for PL has focused on the middle grades (DeMink-Carthew & Olofson, 2020; Nagle & Taylor, 2017; Netcoh & Bishop, 2017), in this study the researcher explored the experience of personalizing learning in a secondary setting. Teachers looking to personalize learning benefit from seeing examples of what other teachers have tried: both the successes and failures, and the subsequent effect on learning and classroom dynamic. Studies have looked at other subjects such as math, but little focus on describing the general experiences of ELA teachers attempting to personalize exists (Walkington & Hayata, 2017). McCarthy et al. (2020) added that the best practices for PL are still evolving as teachers and researchers work to understand what is effective based on the goals for the program.

Practical Significance

In a psychological study of the brain through neuroimaging, Speer et al. (2009) found that reading stories activates the neural sections of the brain which govern visual and motor experiences. Reading about a character or another person experiencing events stimulates the brain to function as if the reader was actually performing those events. ELA teachers tasked with personalizing learning may read about the experiences of other ELA teachers who are

personalizing learning through this study and help prepare them for what the experience may be like in their own schools. Because of the shortage of research about the experiences of teachers as they personalize learning, teachers are currently tasked with changing their entire framework of teaching, interacting with students, and their use of resources without clear guidance about operationalizing PL (Bernacki et al., 2021; Brown et al., 2020; Zhang, Yang, & Carter, 2020). By describing the experiences of actual teachers as they work through the challenges inherent in personalizing learning, other practitioners, policy makers, and administrators may read these stories and make their decisions based upon more information than was previously available. Through interviews, observations, and document analysis, the researcher aims to show other teachers, administrators, and researchers the experiences, struggles, and successes of ELA teachers as they personalize learning in classrooms that prioritize community and discussion (Costigan, 2018). While this study was particular to teachers in Pennsylvania, the lessons here may be beneficial to consider in other areas of the country as well. Studying a high school setting and a content area in particular will also help clarify if all components of PL are introduced and utilized in the same manner district to district or even classroom to classroom. Making educational decisions based on real experiences instead of theoretical ideas alone is helpful to setting up teachers and students for success (Walkington & Bernacki, 2020). Additionally, teachers may be reticent to change their practices without understanding what is being asked of them and what the benefits would be (Kallio & Halverson, 2020). Considering what teachers are doing currently, both what they are doing well and what is not working, is helpful to other teachers looking to try this framework of education.

Other than the significance for other ELA teachers, other stakeholders such as administrators, students, and community members benefit from clarity about the experience of

personalizing learning. Practitioners as well as policy makers must base their decisions on research (Shemshack & Spector, 2020). Administrators benefit from reading about the experiences of teachers using PL to better support their own faculty by understanding the successes and challenges of the participants of the study. For example, if participants all discuss difficulties deciding how to implement the policy, administrators will know to provide more professional development to their own staff. If participants discuss the increased time necessary to create PL content, administrators may provide time during professional development or early dismissals to create and collaborate on content. If the teachers and administrators are able to apply the lessons learned from reading about the experience of personalizing learning, then the students would be positively affected by this study because their teachers would be more confident in their ability to PL. They may be better involved in co-construction of learning goals and opportunities to choose instructional materials and topics. Finally, community members may be affected by this study if teachers, administrators, and students use the experiences of the participants to establish real world learning opportunities for current high school students such as through community projects or internships. Additionally, learners graduating from successful PL schools may be better prepared to apply their unique skillset to jobs in the real world.

Research Questions

Research questions provide a more specific focus of inquiry for a study than the purpose alone (Peoples, 2021). Perceptions form reality, so working to understand the perceptions of experiences furthers understanding of those experiences as guided by research questions (Creswell & Poth, 2018). Understanding the teachers' perceptions or misperceptions of student needs and goals as they make decisions about the learning process for their students will help

paint a more complete picture of PL in ELA. The researcher employed the following questions to guide this research.

Central Research Question

How does personalized learning affect the lived experiences of ELA teachers?

Sub-Question One

How do secondary ELA teachers experience the use of specific strategies to support personalized learning?

Sub-Question Two

How do secondary ELA teachers maintain meaningful social interaction within a personalized learning framework?

Sub-Question Three

How do challenges affect the experiences of secondary ELA teachers personalizing learning?

Definitions

- 1. *Authentic Assessment* A type of assessment which requires the demonstration of real-world skills and is directly relatable to a task a student would need to perform outside of school (Gulikers et al., 2004; Lee et al., 2017; Schmid & Petko, 2019).
- 2. *Cognitive Load* The processing capability of working memory in the brain at any given time to process different tasks (Walkington & Hayata, 2017).
- 3. Competency-Based Assessment (Mastery-Based Learning)- A method of education where students earn scores based on how well they master the necessary content and skills, not on classroom activities or projects and are allowed to take the time required to do so (Lee et al., 2018; McCarthy, Liu, & Schauer, 2020).

- 4. *Differentiation* a teaching strategy that tasks teachers with beginning where students are to cater instructional resources, goals, and activities to their current level (Bernacki et al., 2021; DeMink-Carthew & Olofson, 2020).
- 5. *Instructional Technology (Digital Learning)* Technology created for and utilized by educators to help engage and teach students in the classroom through planning purposes, instructional strategies, assessment, feedback, and data analysis (Basham et al., 2016).
- 6. *Learning analytics* the use of data to enhance learning in various contexts such as with adaptive technology, algorithms, and artificial intelligence (Gašević et al., 2017; New Media Consortium, 2016; Tsai et al., 2020).
- 7. Personalized Learning- Educational framework where students have more control over what, how, when, and where they learn based on their skills, passions, and needs (Childress & Benson, 2014; DeMink-Carthew & Netcoh, 2019; Kallio & Halverson, 2020).
- 8. *Personalized learning plan* a database of information about each student (such as career goals, strengths, short- and long-term projects), which helps teachers, parents, and the students themselves make decisions about their educational experiences (Kallio & Halverson, 2020; Lee et al., 2021; U.S. Department of Education, 2017).
- 9. *Scaffolding* a teaching strategy where teachers provide various levels of supports for students to master skills and concepts without becoming overwhelmed (Bishop et al., 2020; van de Pol, 2014).
- 10. Zone of proximal development- "the difference between the developmental level of the individual at that moment defined by their independent problem-solving skills and their

potential developmental level to be reached as a result of adult guidance or their collaboration with their more advanced peers" (Vygotsky, 1978, p. 86).

Summary

The purpose of this transcendental phenomenological study was to understand the lived experiences of secondary English language arts teachers implementing PL in Southeastern Pennsylvania. Teachers have used PL for decades in a variety of ways, but recent government initiatives introduced a new fervor for student-focused instruction around the country. Through this study, the researcher added to the body of academic literature around PL by describing the experiences of teachers who use student-focused strategies to separate students to address their individual learning differences as well as grouping them together for discourse and collaboration. Understanding the lived experiences of participants and using in-depth data collection helps researchers describe the essence of the experience (Creswell & Poth, 2018). Studying the experiences of secondary ELA teachers as they make decisions about personalizing learning may help other ELA teachers to reflect on their own pedagogical decisions. In this study, the researcher focused data collection on one central question and three sub-questions to explore the components of PL, technological decisions, effects on student learning experiences, and other experiences of ELA teachers as they lived and described them.

CHAPTER TWO: LITERATURE REVIEW

Overview

The purpose of this transcendental phenomenological study was to understand the lived experiences of secondary English language arts teachers implementing personalized learning in Southeastern Pennsylvania. Chapter Two offers a review of the scholarly research related to this topic. Vygotsky's (1978) SDT is discussed, followed by a review of recent literature on defining PL and the components of PL. Lastly, the literature surrounding the perspectives of PL and social learning. Finally, a gap in the literature is identified regarding the need for more research concerning how high school English teachers implement PL to balance social interaction and PL within their classrooms.

Theoretical Framework

A theoretical framework guides the researcher through the choices he or she makes in the research process (Creswell & Poth, 2018). The theoretical framework for this study rested upon Lev Vygotsky's (1978) SDT. While students must eventually demonstrate mastery of skills and content individually, the learning process relies at least initially on social interaction to bring students to mastery (Vygotsky, 1978). SDT highlights the interplay between cultural and societal tools and communication and outlines several important concepts regarding learning, including the importance of social interaction, the more knowledgeable other, and the zone of proximal development (ZPD). SDT is important to understanding how to effectively personalize an inherently social and cultural learning environment, ELA classrooms, without sacrificing social interaction.

Understanding the evolution of SDT's creation and subsequent reception is essential for grounding educational research. Vygotsky developed this theory in 1962 (Wu et al., 2012),

during the period of change that categorized post-Revolutionary Russia (Crawford, 1996). His efforts to construct this theory at that time may help clarify how to orient student-centered learning during the current period of change in education towards more online and PL (Crawford, 1996). In SDT, Vygotsky argued that it is important to consider both cognition and context (Crawford, 1996), including the subjectivity of personal experiences that affects cognition within a context such as social interaction (Eiser, 1994). SDT's focus on interaction and subjectivity critiqued the prominent theories of behaviorism and positivism at the time, which were founded on empiricism (Crawford, 1996). Instead, SDT helped pave the way for constructivism in education, which is the belief that knowledge is actively constructed by individuals based on their experiences, and the theory proposed that experiences of social and cultural interactions allow learning to be constructed and then internalized (Erbil, 2020; Tzuo, 2007). SDT became popular in the 1980s, especially the ideas about a ZPD and a more knowledgeable other (Tzuo, 2007). Western researchers have since often focused on transferring SDT about a more knowledgeable other and the ZPD into the traditional teacher-lecture structure of education and teacher-directed scaffolding (Crawford, 1996). In this traditional framework of education, teachers are in control of the learning and classroom.

Because an individual must actively construct knowledge, then their personal views, context, and prior knowledge affect their view of learning and the authenticity of learning tasks, which lecture does not account for (Crawford, 1996). Authentic learning tasks in the 21st century often include information and communications technology which makes differentiating content, learning tasks, and assessments for personal interests, needs, and backgrounds more feasible (Lee et al., 2017; Schmid & Petko, 2019). In SDT, the subjectivity of consciousness and context is fitting to pair with purposeful, targeted information and communications technology as the

mode of instruction (Crawford, 1996), such as is vital to PL (Bingham, 2019). Therefore, rather than rely on a teacher for knowledge, teachers may personalize the more knowledgeable other to be some form of information and communications technology or a competent peer that teachers may use to facilitate learning within socio-cultural contexts (Erbil, 2020).

In SDT, Vygotsky (1978) suggests that development occurs first through social learning such as observation or interaction before becoming intrinsic. He believed that individuals must learn from others first and that the social aspects of culture and community improve cognition. Using SDT, if students reflect on their internal cognition after participating in social learning using quality communication, then learning ensues (Erbil, 2020). Observing others or learning from others, such as through modeling or a more knowledgeable other paired with selfreflection, also improves self-efficacy, according to Bandura (1977). SDT is a student-centered theory that states students must actively participate in learning to construct knowledge (Vygotsky, 1978). This scaffolding process moves students from learning with and from others to independent mastery and puts them in their ZPD, which Vygotsky (1978) described as the ideal learning environment (McCarthy, Liu, & Schauer, 2020). Keeping students within their ZPD involves at least some measure of PL so that the students are engaged at an appropriate level and challenged in a way that intrinsically motivates them to learn, thus increasing their selfefficacy. According to SDT, learning and understanding patterns of change, such as helping students learn how to become more autonomous and self-efficacious learners in general, are more critical to real change or learning than an isolated incidence of change (Crawford, 1996).

SDT will inform this transcendental phenomenological study of how high school English classrooms in southeast Pennsylvania personalize learning without forfeiting socio-cultural development by orienting the observations, interviews, and document analysis for situations of

socio-cultural learning such as through discussions, modeling or scaffolding, and collaborative learning. Because Vygotsky (1978) explained that humans use social tools such as speech and writing to develop and work through culture (Erbil, 2020; Wu et al., 2012), understanding SDT is vital to facilitating ELA courses successfully. In SDT, both culture and language are essential to learning, and the social interaction implicit in both culture and language, such as is prominent in ELA, enables cognitive development. Along with culture and language, SDT also emphasizes the importance of connections between people within a socio-cultural context (Wu et al., 2012). ELA courses often focus on class discussions and interactive communication based on cultural texts (Alston et al., 2018; Sperling & Woodlief, 1997) or informative and argumentative topics for writing (Newell et al., 2015; Newell et al., 2018).

Newell et al. (2015) also explained that teaching writing, especially argument, relies upon social understanding and interactions so that students effectively engage their audiences.

Therefore, classroom observations of English courses should yield social interactions around the explored content, such as with more knowledgeable others or strategies within the students' ZPDs. Interviews with the English teachers from those classrooms should also highlight how learning and cognition stem from these types of social interactions and how they are curated along with PL through individualized content, activities, and assessments such as through technology (Alamri et al., 2020; Basham et al., 2016). SDT will shape this study by focusing my interview questions, observations, and document analysis on experiences orienting students within their ZPD's through personalization as well as working with more knowledgeable others and socialization in general through peer or group work. Ideas from SDT are incorporated into the research questions to guide this study by inquiring about teacher experiences while placing students within their ZPD's through personalization and maintaining social interaction in a

personalized classroom. These research questions will guide the interviews, observations, and document analysis to consider teacher experiences of personalizing learning with the SDT to focus on situations where teachers incorporate social interaction and their descriptions of their experiences doing so. The researcher will collect and analyze this data using the SDT by considering themes around placing students within their ZPD's through personalizing, and themes around maintaining social interaction such as using more knowledgeable others all based on data collected from interviews, observations, and document analysis. The researcher will report these results of themes about teacher experiences personalizing learning as well as maintaining social interaction based on the SDT. This study will work to understand how high school English teachers in Southeastern Pennsylvania use the SDT to provide both social experiences as well as PL within the classroom without sacrificing either.

Related Literature

The research on PL seeks to understand various aspects of PL, including how teachers are using it to tailor learning to the needs and interests of individual students at multiple grade levels and content areas (Alamri et al., 2020; McCarthy, Liu, & Schauer, 2020; Walkington & Hayata, 2017), such as ELA (McCarthy et al., 2020). A lack of clarity on the definitions of PL as well as the research behind how teachers implement PL increases the difficulties of successful implementation (Bernacki et al., 2021; Zhang, Yang, & Carter, 2020). Curating a clear definition of what PL means and how it is used in practice helps create a foundation upon which further discourse and research on PL will build (Tomlinson, 2017). Part of defining PL is looking at the various components which work to personalize learning for students in different ways (Pane et al., 2017). Defining what PL is and the components which interconnect to create it is the first

step in analyzing the advantages and disadvantages of PL in various content areas, especially for social interaction in ELA (Costigan, 2018; Ford, 2021; Luettchau, 2021; O'Loughlin, 2021).

Personalized Learning

Even though PL continues to grow in popularity (Bingham, 2017; McHugh et al., 2020), this educational strategy is challenging to define because so many versions and iterations exist (Horn, 2017; McHugh, 2020; Netcoh & Bishop, 2017; Tomlinson, 2017; Walkington & Hayata, 2017). In general, PL is a student-centered approach to education that empowers learners to become active participants in the learning process to master essential standards and skills, but most definitions of PL do not mention social interaction or specific content areas (Alamri et al., 2020; DeMink-Carthew & Netcoh, 2019; LeGeros et al., 2022; Tomlinson, 2017). PL stems from a belief that all students have the capacity to learn when supplied with adequate resources and considerations (Roberts-Mahoney et al., 2016). The current definitions of PL highlight it as an educational model which includes the use of various strategies, programs, approaches, and supports to meet the needs, goals, interests, cultures, and backgrounds of individual students (Halverson et al., 2015; Johnson et al., 2016; Kallio & Halverson, 2020). What, how, when, and where students learn is tailored to their individual needs, preferences, and skills and places the student's interests and abilities at the center of the educational experience (Alamri et al., 2020; Bernacki & Walkington, 2018; Bingham, 2019; Childress & Benson, 2014; Netcoh & Bishop, 2017). In fact, in many iterations of PL, students participate in tailoring the curriculum, instruction, and assessment for their unique needs and preferences (DeMink-Carthew & Netcoh, 2019; DeMink-Carthew & Olofson, 2020). Allowing students to have agency over their learning is still developing in the field of education, and research into how to scaffold this process of coownership is currently evolving (DeMink-Carthew & Netcoh, 2019; Netcoh & Bishop, 2017;

Pane et al., 2017; van de Pol et al., 2014). Understanding what the process looks like in the field today will provide necessary insight to other teachers.

The idea of tailoring instruction for each student began with B.F. Skinner's (1958) use of teaching machines to personalize learning in 1958 (Basham et al., 2016) but did not always include the use of technology (McCarthy, Liu, & Schauer, 2020). Bloom (1984) advocated for one-to-one teaching as the ideal learning environment in 1984 with personalized tutoring. Many early forms of PL occurred when tutors personalized instruction for their tutees (McCarthy, Liu, & Schauer, 2020; McHugh et al., 2020). Modern iterations of PL often include technology as a critical component to able to tailor the learning experience for each student (Bingham et al., 2016; Gašević et al., 2015; Halverson et al., 2015; Johnson et al., 2016; Lee et al., 2018; Lee et al., 2021; Schmid & Petko, 2019). The writers of government initiatives, such as the Every Student Succeeds Act of 2015, the National Education Technology Plan of 2016, and the Race to the Top initiative of 2015, have taken advantage of educational technology to encourage school districts to personalize learning with the hope of improving test scores, engaging students, and creating more capable citizens (Basham et al., 2016; McCarthy, Liu, & Schauer, 2020; Netcoh & Bishop, 2017). ELA teachers likewise hope to engage students and create more capable citizens, so understanding how PL helps and hinders this process is important.

Components of Personalized Learning

While the general background and definitions are helpful for understanding PL, individual school districts and even teachers, such as content area teachers of ELA, may use it disparately by focusing on unique components to engage students (Netcoh & Bishop, 2017; Tomlinson, 2017). In fact, Tomlinson (2017) stated that no one way to personalize learning will work for every school every year. Therefore, understanding the common components teachers

use to employ PL helps paint a portrait of how teachers, including ELA teachers, are working to personalize learning in classrooms without sacrificing social interaction (Basham et al., 2016; Netcoh & Bishop, 2017; McCarthy, Liu, & Schauer, 2020). Most components of PL rely on at least some form of digital technology (Bingham et al., 2016; Bingham, 2019; Gašević et al., 2015; Halverson et al., 2015; Johnson et al., 2016; Lee et al., 2018; Lee et al., 2021; Schmid & Petko, 2019) to allow teachers to provide flexibility, customization, and transparency for the learning process for each student and their learning team (Bingham, 2017; Gašević et al., 2015; Halverson et al., 2015). The use of technology allows teachers to personalize strategies, scaffolds, and options for learner choice (Alamri et al., 2020; Basham et al., 2016). Teachers use digital technology to offer educational choices where student interests and agency are paramount (Childress & Benson, 2014; Halverson et al., 2015; Walkington & Hayata, 2017). Most of these studies view technological components of PL as an asset to personalizing learning such as Bingham (2019) who argued that the use of technology to scaffold and provide feedback allows instructors the freedom to work with students one on one during class times. Alamri et al. (2020) and Basham et al. (2016) likewise agree that technology is the key to unlocking PL because it allows teachers to offer options for differentiation and scaffolding using various tools and strategies. However, other studies, such as from Bingham et al. (2016), found technology to be a barrier to PL because of the potential to fail or the lack of available resources. While this educational technology is not perfect, it does open more opportunities for PL than existed prior to these advancements.

The common components of PL, which are built on digital technology, student interest, and student agency, are personalized learning plans (PLPs) (Alamri et al., 2020; Lee et al., 2017; Lee et al., 2021; McCarthy, Liu, & Schauer, 2020; Pane et al., 2017; U.S. Department of

Education, 2017; Wongwatkit, 2017) and learner profiles (LPs) (Halverson et al., 2015; McCarthy, Liu, & Schauer, 2020; Pane et al., 2017). For example, McCarthy, Liu, and Schauer (2020) note that PLPs often include LPs to help students, instructors, parents, and even community members to focus on the needs and interests of the individual child in question. Other components of PL which focus more on instruction and the use of technology include active learning strategies (Erbil, 2020; Horn, 2017; Kostaris, 2017; Lee et al., 2017; Netcoh & Bishop, 2017; Wu et al., 2012), competency-based assessments (Halverson et al., 2015; McCarthy, Liu, & Schauer, 2020; Pane et al., 2017; U.S. Department of Education, 2017), and data analysis and adaptive technologies (Alamri et al., 2020; Alsobhi & Alyoubi, 2019; Basham et al., 2016; Johnson et al., 2016; Kallio & Halverson, 2020; McCarthy, Liu, & Schauer, 2020). Pane et al. (2017) argue that most of these components are interrelated and feed off of one other, because personalized learning paths and LPs dictate the kinds of active learning strategies students use to interact with content and learn skills, teachers use CBAs to measure mastery of the content and skills learned in those activities, and then data analysis and technology allow students and teachers to make sense of the results of the assessments formatively and summatively. Additionally, components of PL which rely on teachers alone include frequent feedback (Basham et al., 2016; Clow, 2013; Gašević et al., 2015; Pane et al., 2017; Pardo et al., 2019) teachers as facilitators (Childress & Benson, 2014; DeMink-Carthew & Netcoh, 2019; LeGeros et al., 2022; Nagle & Taylor, 2017; Netcoh & Bishop, 2017), and student voice and choice (DeMink-Carthew & Netcoh, 2019; Mötteli et al., 2021; Schmid & Petko, 2019; Schmid et al., 2022). Pardo et al. (2019) explain that in PL, teachers use technology to facilitate activities and provide feedback at scale but maintaining relationships and providing adequate feedback becomes challenging when teachers have too many students under their care at one time. Finally,

a component of PL that administrators have the most control over is flexible learning environments (Basham et al., 2016; Halverson et al., 2015; Li & Wong, 2021; McCarthy, Liu, & Schauer, 2020; Pane et al., 2017; U.S. Department of Education, 2017). Li and Wong (2021) discuss flexible learning environments as including the bell schedules, curricula, physical arrangements, pacing, and much more. Understanding these components individually and how they work together in classrooms, such as in ELA classrooms, ensures high-quality, student-centered pedagogy (Bingham et al., 2016; DeMink-Carthew & Netcoh, 2019; Johnson et al., 2016). While not every school uses each of these components, seeing how these components work in ELA classrooms in the real world will help other teachers understand their benefits and disadvantages.

Personalized Learning Plans

One component of PL that teachers must navigate is the curation and use of PLPs (sometimes called personal learning paths) to inform instruction and instructional decisions (Kallio & Halverson, 2020; U.S. Department of Education, 2017). In PL, students must participate in the decision-making about their education (DeMink-Carthew & Netcoh, 2019; Nagle & Taylor, 2017; U.S. Department of Education, 2017); therefore, some school districts use PLPs to co-construct learning goals with students, guide the learning process, and document progress (Kallio & Halverson, 2020; U.S. Department of Education, 2017). A PLP is a customized educational plan that considers individual differences such as interests, learning styles, career goals, and more (Lee et al., 2018; Lee et al., 2021; McCarthy, Liu, & Schauer, 2020; Pane et al., 2017; U.S. Department of Education, 2017) to increase motivation (Alamri et al., 2020; Halverson et al., 2015) and engagement (DeMink-Carthew & Netcoh, 2019). Using interests to personalize learning, such as in a PLP, improves understanding (Bernacki &

Walkington, 2018; McCarthy, Liu, & Schauer, 2020; Wongwatkit et al., 2017); however, little evidence suggests that basing a PLP on different learning styles alone will improve learning (Horn, 2017). Horn (2017) adds that personalizing learning based on preferred learning styles alone such as auditory or kinesthetic methods produces weak results for learning as opposed to more traditional methods of instruction. The technology that allows teachers and students to co-construct PLPs also enable them to monitor the mastery of skills to ensure that the activities are practical for learning (Bingham, 2017). Including students in the discussion about their own learning helps to engage them in their education.

Adolescents need autonomy (DeMink-Carthew & Netcoh, 2019), and when students have autonomy in their PLPs, positive outcomes such as well-being and mental health improve (Deci & Ryan, 2000). Students must have an active role in discussing learning and interests, sometimes called having voice and choice, in their own learning process (DeMink-Carthew & Netcoh, 2019; Kallio & Halverson, 2020; Nagle & Taylor, 2017). In schools that already personalized learning, students liked having choice and control (DeMink-Carthew & Olofson, 2020), flexibility (Debs et al., 2019), and they more readily adopted a growth mindset (Nagle & Taylor, 2017). DeMink-Carthew and Olofson (2020) described a case study of PL using PBL in a middle school social studies classroom where the students reported enjoying the increased choices offered to them. Debs et al. (2019) surveyed college students engaged in project-based or discovery learning and 35% of students said they appreciated the flexibility to focus on areas of interest in these programs. Nagle and Taylor (2017) conducted a self-study of PL implementation in middle school humanities and found improvement in their students' growth mindsets after working through and reflecting on self-selected goals. However, to excel with this increased choice and flexibility, students must learn self-direction to limit procrastination or other poor

choices (Debs et al., 2019; LeGeros et al., 2022). Teachers must ease students into choice by scaffolding the appropriate processes and decision-making skills (DeMink-Carthew & Netcoh, 2019; LeGeros et al., 2022) so they do not get too frustrated (Debs et al., 2019). The school and teachers set up parameters to help guide the creation and evolution of the PLP (Pane et al., 2017), such as through a cycle of goal setting, performance, and reflection (McCarthy, Liu, & Schauer, 2020). Teachers are also crucial to the PLP co-construction process to include activities and goals for skills other than content, such as social-emotional learning and 21st-century skills (Kallio & Halverson, 2020). These skills are essential to real-life situations, and activities' authenticity improves competency (Alamri et al., 2020). Even with these steps and scaffolds, DeMink-Carthew & Olofson (2020) found that it is difficult to give all students the correct amount of control that is best for them and makes them happy. Working to see how ELA teachers provide what they deem the appropriate amount of control and what those experiences are like will be invaluable to others struggle with this concept.

Learner Profiles

The PLP is based on an array of data organized in a LP (Halverson et al., 2015; McCarthy, Liu, & Schauer, 2020; Roberts-Mahoney et al., 2016; Shemshack et al., 2021). Like a customer profile in the business sector, LPs allow the education process to be customized based on the data available about each student (Roberts-Mahoney et al., 2016). LPs include information on the student's strengths, weaknesses, motivations, interests, family life, and more, and will be updated, usually by the learner, as he or she changes over time (Shemshack et al., 2021). A LP follows students from kindergarten through college and is based on data that must be managed, organized, and interpreted (Roberts-Mahoney et al., 2016) and is available to teachers, parents, and students themselves (Pane et al., 2017). This data must be up to date and based on various

strengths, areas for improvement, goals, and more (Halverson et al., 2015; McCarthy, Liu, & Schauer, 2020; Pane et al., 2017). LPs help to measure progress toward goals such as mastery of skills and career steps (Halverson et al., 2015; McCarthy, Liu, & Schauer, 2020; Pea, 2014; Yesudas et al., 2014). Teachers use LPs to create projects and find learning opportunities to match the interests and level of mastery on skills (Shemshack et al., 2021). Teachers and learners use LPs and PLPs to collaboratively guide learning activities and then evaluate progress (Kallio & Halverson, 2020). Avallone (2022) in her post on PL in Next Gen Learning argues that teachers have asked students to create LPs for decades when they ask about students' learning preferences, interests, and family life. However, in PL, instructors use this information to not just build relationships with students but to also individualize the topics that students interact with to increase their literacy and improve their skills (Avallone, 2022). For example, a student could analyze a short story on skateboarding or on horseback riding based on their Lexile and interests while still employing ELA skills such as analyzing characterization and theme. However, few studies have measured effectiveness of LPs specifically, separate from context personalization which differentiates the context of the learning for individual student interests (Bernacki & Walkington, 2018). Bernacki and Walkington (2018) found that personalizing mathematical content for student interests improve student interest in mathematics but had only a small effect on performance. Working to understand how ELA teachers possibly use learner profiles to personalize ELA content will expand the existing research on LPs.

Active Learning Strategies

Another component that many school districts employ to personalize learning based on the PLP and LP is a variety of active learning strategies, such as problem-based (or projectbased) learning (PBL), flipped instruction (Lee et al., 2021), and gamification (Ofosu-Ampong, 2020). PBL, flipped instruction, gamification, and other active learning strategies are based on the theory of constructivism, which is the belief that the learner must actively construct knowledge to internalize and understand it (Debs et al., 2019; Erbil, 2020). To construct knowledge, students must base the new learning on their prior knowledge and then participate in active meaning-making to incorporate the new learning or skills into their mental framework (Debs et al., 2019). Flipped instruction is an active learning strategy where students read or watch instructions to learn essential concepts outside of the primary class time, and then spend time in class to practice the skills (Costello, 2017). Similarly, PBL was originally created for medical students to actively learn medical skills in authentic and cooperative ways during class time (Lee et al., 2017; Wu et al., 2012). Variations of active learning, such as PBL, have become popular through such initiatives as Genius Hour, Passion Project, and 20% Time, where teachers allow students to participate in authentic learning opportunities to improve their skills (Kallio & Halverson, 2020; LeGeros et al., 2022). Some of the schools that use PBL call it PL (Horn, 2017), but teachers have the opportunity to use PBL to personalize learning effectively when done well (DeMink-Carthew & Olofson, 2020). For example, teachers may use PBL to compromise between an entirely prescribed curriculum and total student choice by offering more varied paces and options for projects or problems to focus on (Tomlinson, 2017). Additionally, teachers and students often co-construct goals in both PBL and PL (Kallio & Halverson, 2020). This ability to co-construct goals and work on authentic learning tasks increases relevancy (Netcoh & Bishop, 2017; Walkington & Bernacki, 2018). Researchers have found that PBL increases students' ability to problem solve, think critically, work as a team, and work autonomously but does not affect improvement in knowledge or competencies any more than traditional methods of instruction (de la Puente Pacheco, 2020; Parrado-Martínez & SánchezAndújar, 2020). Teachers must consider the purpose of their time, resources, and instruction before implementing a new instructional strategy such as PBL.

Another example of an active learning strategy teachers utilize in PL is gamification, where teachers incorporate game strategy or design into their course (Ford, 2021; Ofosu-Ampong, 2020). Teachers use gamification to allow students to restart activities, move at unique paces, participate in inquiry, and have more choice based on their curiosities (Ford, 2021). Teachers who gamify their course may include levels of activities or experiences, accumulation of points, work towards goals or badges, and changes in status or title within the game (Ofosu-Ampong, 2020). Most ELA students enjoy the increased choice in gamification, such as through a choose-your-own-adventure, but the research regarding the relationship between gamification and motivation is still unclear (Ford, 2021). Teachers using gamification spend more time facilitating skill and knowledge acquisition necessary for future aspects of the gameplay (Ford, 2021). Gamification does not increase student learning when compared to traditional methods of instruction (Mese & Dursun, 2019; Rahman et al., 2018). Gamification is different from incorporating video game analysis as a type of text, which is possible in ELA classrooms as well but does not necessarily further PL (Nash & Brady, 2021). These active learning strategies provide options for teachers to serve the learners in their classrooms differently than other methods of instruction.

One goal of using active learning strategies and constructivist techniques is to improve problem solving skills (Costello, 2017), but learning in entirely digital settings may lead to a deficit of problem solving or other authentic skills (Basham et al. 2016). So, learning facilitators must be purposeful with how they use technology and PBL to benefit students. For example, a meaningful use of technology at some points in a course allows students to focus on even more

authentic tasks at other times (Schmid et al., 2022). Schmid et al. (2022) also found that technology to PL such as in these active learning strategies had a moderate effect on the supportive classroom climate and on student voice and choice. Unfortunately, some ELA educators use PBL and common core standards to teach workplace skills in authentic settings but do not engage in transactional reading and analysis of literature to apply meaning to students' personal lives (Costigan, 2018). While ELA students are learning problem-solving in authentic tasks, they are not learning the art of applying their lives to literature and literature to their lives (Costigan, 2018). One compromise teachers take is to use PBL to promote perspective taking and empathy (Garcia et al., 2021), such as through collaboration (Debs et al., 2019). By framing PBL with improving relationships and communication through peer interaction, motivation and satisfaction with learning increases (Debs et al., 2019). Some teachers struggle when implementing PBL because they must maintain clear expectations for a variety of different projects and goals based on the individual student needs, interests, and skills practiced (Netcoh & Bishop, 2017). Seeing how ELA teachers incorporate or do not incorporate active learning strategies such as PBL, flipped instruction, or gamification to PL will clarify how students may work to construct ELA knowledge in individualized ways.

Competency-Based Assessments

Teachers in PL frameworks may use active learning strategies or other instructional methods to help students perform well on competency-based assessments (CBAs), also sometimes known as mastery-based assessments which are assessments where students demonstrate their competency on standard (McCarthy, Liu, & Schauer, 2020; National Forum on Educational Statistics, 2019; Pane et al., 2017; U.S. Department of Education, 2017). Teachers teaching for competency convey mastery as a combination of knowledge, skill, ability, and

attitude (Debs et al., 2019). Teachers use CBAs then to focus the trajectory of content and provide specific formative assessment (Basham et al., 2016; Halverson, 2015; Lee et al., 2017). Teachers are able to personalize these formative and even summative assessments because students may demonstrate mastery of knowledge, skills, abilities, and attitudes in a variety of ways (Alamri et al., 2020). When students show learning multiple times in many ways, the learning is more authentic and meaningful because they are more likely to use the skills in the real world (Basham et al., 2016; Pane et al., 2017). When using CBAs, students are able to show mastery at their own pace since students master skills at different rates (Kallio & Halverson, 2020; Pane et al., 2017). With CBA, the student must reach mastery to move on (Lee et al., 2021; Pane et al., 2017). In order for students to improve their ability to demonstrate mastery and subsequently move on, teachers must provide instant (Bingham, 2019), personalized (Pardo et al., 2019) feedback. The data of which skills students have mastered from CBAs allows teachers to provide quicker and more specific feedback to increase mastery (Bingham, 2019). In ELA, student data of skill mastery would include which students demonstrated what level of mastery in topics such as parts of speech, identification of bias, and much more. Technology allows teachers to collect this data as well as provide the personalized feedback from it (Pardo et al., 2019). One implementation strategy some teachers have found effective to provide feedback more quickly is to grade sections of CBAs in smaller chunks (Bingham, 2019). However, if the assessments do not actually measure mastery, teacher use of data analytics tied to the assessments will not improve learning (Clow, 2013).

States around the country demonstrate a growing drive and ability to measure learning and outcomes, but teachers and administrators who work to measure learning and outcomes must do so purposefully and with great care (Educause, 2018). Teachers should work to assess

authentic learning (Educause, 2018) by considering how individuals use the content in the real world instead of personalizing to surface-level interests (Walkington & Hayata, 2017). Additionally, while some researchers have found that teachers are able to align CBAs to CCSS (McCarthy, Liu, & Schauer, 2020) and to use CBAs to effectively to support student learning (Paquette, 2007; Popham, 2007), Lee et al. in 2021 discovered that use of CBAs may not actually affect annual yearly progress (AYP). Other issues with CBA arise such as when teachers must make decisions about how to deal with the logistics of students operating at different paces and aspects of a curriculum all at the same time (Pane et al., 2017). Some teachers use gamification or badges to organize the disparate learning experiences in the room (Debs et al., 2019), but not all classes lend themselves to such frameworks. Additionally, Bingham et al. (2016) found that parents and students may be resistant to the new grading system of CBA in their study of implementing PL because it goes away from traditional grades to a new system indicating which skills were mastered or not. The National Forum on Education Statistics (2019) explains that teachers usually use a 1-4 system to indicate if a student demonstrated approaching proficiency (1), foundational proficiency (2), complex proficiency (3), or going beyond (4) rather than letter grades. Students may also follow certain progressions to master skills instead of working through traditional courses (National Forum on Education Statistics, 2019). Colleges and employers trained to consider traditional transcripts may struggle to make sense of this new system at first. Teachers and administrators must consider the challenges of CBA in relation to the benefits and implement it with care.

Data-Driven Learning

Data-driven learning technologies include aspects of teaching such as learning management systems, learning analytics (Kallio & Halverson, 2020; Walkington & Bernacki,

2020), adaptive technology (McCarthy, Liu, & Schauer, 2020; Van Schoors et al., 2021; Walkington & Bernacki, 2020), and artificial intelligence (Li & Wong, 2023). Learning analytics is the application of web analytic technology to improve the learning process for individual students by analyzing the details of their interactions online to enhance their digital LP and optimize future learning (Gašević et al., 2017; New Media Consortium, 2016). Adaptive technology is programmed to utilize the results of learning analytics to advance concepts and activities for students in an online setting and adapt what and how they interact with the material to optimize their learning (Basham et al., 2016; Van Schoors et al., 2021). Artificial intelligence is the ability of technological systems to use human-like processes such as adapting, synthesizing, and learning based on data for complicated processing tasks (Li & Wong, 2023; Popenici & Kerr, 2017). Teachers, administrators, and students are increasingly using artificial intelligence to perform educational tasks such as write reports or lesson plans, answer questions, and personalize learning for individual needs such as through personalized feedback (Li & Wong, 2023). Kallio and Halverson (2020) and Van Schoors et al. (2021) agree that data-driven learning technologies allow teachers to participate in widespread PL across districts and within their classrooms. These researchers found that teachers would not have the time or resources to make individual instructional decisions about each student such as offering individualized reading materials multiple times per day by hand. These new educational technologies are often discussed along with the concepts of PL because they allow teachers or instructional technologists to make personalized pedagogical decisions based on data (Schmid et al., 2022; Strekalova-Hughes et al., 2021). Adaptivity changes the difficulty and pace of instruction based on learner mastery demonstrated in a responsive system (Bernacki et al., 2021). The frequent measurements necessary to adjust the learning process to individual needs in real time is a

hallmark of PL (McCarthy, Liu, & Schauer, 2020; Pane et al., 2017; U.S. Department of Education, 2017). PLPs and PL in general are difficult without good data and technology as well as professional development about how to use it (Bingham et al., 2016; New Media Consortium, 2016). For example, students need to do enough work for the technology to gather data about their performance and preferences (Bingham, 2017). Teachers reticent to base their pedagogical decisions using technology may struggle to transition to PL because of the ubiquitous reliance on technology to collect and organize data to drive learning. Administrators hoping to push implementation of PL must invest in quality technology, technology experts, and technology professional development to use these resources to benefit students. Seeing how ELA teachers use data-driven learning to personalize learning in their classrooms will clarify the extent to which data is helpful for ELA content.

With enough professional development, the use of technology to personalize learning decreases teacher workload (Shemshack & Spector, 2020). In fact, the use of technology is essential to PL and documenting learning (Lee et al., 2018) such as through progress monitoring (Basham et al., 2016; Pane et al., 2017). Instructors have access to more data than ever (Gašević et al., 2017) to provide data-informed real-time feedback at scale (National Forum on Educational Statistics, 2019; Pardo et al., 2019). Learning analytics provides feedback to teachers so they are able to track student progress and risk of failure, and not using data well is detrimental (Gašević et al., 2017). All these strategies and data-driven discussions help teachers provide PL (Halverson et al., 2015; Pane et al., 2017). For example, teachers have begun to use such existing programs as Accelerated Reader, Kahn Academy, and Lexia which all use algorithms to adjust content based on student performance (McCarthy, Liu, & Schauer, 2020) and IXL which does the same (McHugh et al., 2020). These and other applications allow

students to work at their own pace and on the topics and skills they most need to master (Bernacki et al., 2021). A criticism of learning analytics and adaptive technology is that the technology puts educational decisions in the hands of corporations (Roberts-Mahoney et al., 2016), and most educational data mining focus on the tech side, not the pedagogy (Clow, 2013). Therefore, teachers must be intentional about how to select, practice, teach, and use learning analytics and adaptive technology to inform their educational decisions.

In ELA classrooms, these technologies focus on reading for information to answer multiple choice questions, which Costigan (2018) argues is the least engaging or rewarding aspect of ELA. Therefore, teachers must be educated about the use of learning analytics and adaptive technology and use the data to provide autonomous choice (Bernacki et al., 2021), real-time pathways and grouping (Alsobhi & Alyoubi, 2019; Alamri et al., 2020; Basham et al., 2016), and quality classroom management around the use of technology (Schmid et al., 2022). Further, the students themselves must be trained to use the technology in question accurately and responsibly (Schmid et al., 2022). For example, teachers are able to train students to make multimodal projects which improve the quality of their interactions and empathy as opposed to dealing with text alone (Garcia et al., 2021). While data-informed instruction such as with learning analytics and adaptive technology provides more robust options for PL, this use of technology is not a magic solution to PL.

Frequent Feedback

Another component of PL that teachers use to improve student success is frequent, personalized feedback (Debs et al., 2019; Li & Wong, 2021). According to Major et al. (2021), frequent feedback is one of the top three themes of PL along with individualizing instruction for student interests and adjusting activity levels and paces based on student needs. Teachers should

seamlessly incorporate individualized feedback along with learner autonomy and differentiated instruction in all learning activities for PL by providing explicit, timely feedback until students demonstrate mastery (Porath & Hagerman, 2021; Shemshack & Spector, 2020). This real-time feedback improves individual student performance (Shemshack et al., 2021; Shemshack & Spector, 2020). by showing students where and how to revise and resubmit their work (Debs et al., 2019). Teachers have provided informal and written personalized feedback for hundreds of years (Shemshack & Spector, 2020). However, some teachers eventually began using technology to automate feedback such as how Skinner's 1960 automatic teacher machines, one early way instructors tried to personalize learning, gave automatic feedback about the correctness of student responses (Brass & Lynch, 2020). Similarly, data-driven technology such as learning analytics mediates personalized feedback more so than traditional learning management systems (Ingkavara et al., 2022). One method of adaptivity is to set up technology to provide personalized feedback (Van Schoors et al., 2021), such as based on student-created goals and parameters (Ingkavara et al., 2022). For example, tech-based tutoring such as an Intelligent Tutoring System provides individualized feedback to students (Shemshack et al., 2021; Walkington & Bernacki, 2019). Additionally, new learning robots such as the Smart Learning Partner recognize emotion from facial expressions and provide personalized feedback through encouragement (Chen & Yang, 2021). While some critics argue that these methods of feedback from technology steal jobs from teachers, the use of artificial intelligence to provide feedback improves teachers' capabilities to build relationships and elaborate on feedback instead of entirely replacing them (Patkar & Kumbhar, 2021). Teachers may use technology to free their time to build relationships, make insightful decisions, and provide thoughtful feedback to students.

To personalize learning, teachers should use technology to provide personalized feedback in specific and timely ways to help learners improve on their individualized objectives (Shemshack & Spector, 2020). Specific and timely feedback is more beneficial for student learning during the learning process through formative assessment rather than after the learning process is over as summative assessments (Brooks et al., 2019). Teachers provide feedback at different levels such as for the task, process, self-regulation, and self-level (Brooks et al., 2019). Brooks et al. (2019) conducted classroom observations for one teacher and 28 students to study the types of feedback teachers provide to students, and they found that most feedback provided information on how students were performing on current tasks as opposed to information about how to improve in the future. Students must then learn to seek and use whatever feedback they receive to improve their performances and learning processes (Walkington & Bernacki, 2019). Walkington and Bernacki (2019) studied the use of an intelligent tutoring system for teaching algebra to 106 high school students, and they found that the depth of personalization affects the engagement and success of the tutoring. For example, a student with a superficial interest in gaming would not benefit from an algebraic problem about the details and minutiae of Minecraft and in fact these details would disrupt the learning process, but a student with a deeper interest in Minecraft would benefit from such tutoring and feedback examples. To help students learn how to accept and apply feedback, teachers may scaffold their feedback to walk students through the revision or thought process of improvement, which has been proven to effective for lowperforming students (Ingkavara et al., 2022). Ingkavara et al. (2022) studied 292 high school students in online physics classes where half of the students received conceptual guidance and options based on their learning preferences for self-regulation, and the other half participated in a traditional online self-regulated course. Students who received options for personalization and

additional scaffolding in the course outperformed their peers in the control group in the posttest, indicated that scaffolding feedback and personalization based on interest improve learning. To model formative assessment and self-regulation, teachers may accept feedback from students and then change their teaching practices based on the results (Porath & Hagerman, 2021). No person is perfect at everything he or she tries the first time through, so feedback, especially frequent personalized feedback, helps refine the process of learning.

Teacher as Facilitator

In PL, teachers move from the 'sage on the stage' to the 'guide on the side' by facilitating an active, student-centered learning process where students learn by doing instead of the teacher being the central source of knowledge in the room (Educause, 2018). This new role is a big change from the traditional expectations for teachers which may be difficult for new PL teachers to navigate (Netcoh & Bishop, 2017; Li & Wong, 2021). The student-centered focus in PL causes a dramatic shift in control from decisions being made by the teacher alone, to the teacher and student making decisions together, or even the teacher empowering the student to make educational decisions (Bishop et al., 2020). Bishop et al. (2020) studied teacher perceptions of PL in 11 elementary schools in Vermont and the participants described the importance of student autonomy over their learning process by choosing which progressions to work on at any given time and allowing them to work at their own level and pace. The teachers show students how to see which skills in the progressions they have yet to master, which playlists or access to content they may use to learn them, and what options exist to demonstrate their learning. The students in the room then might all be working on different projects or activities based on their interest and skill level, and the teacher facilitates and provides feedback along the way. For example, one student may be analyzing a story about snakes in South Carolina based on his Lexile and interest

to improve vocabulary acquisition while another student may be writing a short story about her experiences riding a horse using vivid description, or they may not even all be working on ELA content at the same time. Teachers may struggle to balance the topics that students are interested in and the content that is assessed based on standards (LeGeros et al., 2022). Even when teachers successfully give up control of the classroom, the students must learn how to regulate their own learning (Basham et al., 2016) and how to grow from failure (Halverson et al., 2015). To facilitate this shift in role and control in the classroom when transitioning to PL, teachers need support such as through professional development, time, resources, and guidance (Tomlinson, 2017). Few studies currently focus on improving instruction in PL through teacher experiences and choices (Li & Wong, 2021; Netcoh & Bishop, 2017). Li and Wong (2021) in their comprehensive review of 203 articles related to PL found most success factors for PL focused on learner characteristics or the learning process instead of teacher decisions. However, some researchers considered teacher accountability; for example, Lee et al. (2018) explained that PL teachers use technology to improve the experience such as for record keeping. Nandigam et al. (2014) described successful PL practices as tailoring lessons to benefit individual students in existing curricula. Netcoh and Bishop (2017) found that teachers need professional development in areas such as scaffolding student-led learning and facilitating various projects at once to be successful with PL. Thus, even though teachers need to learn quality PL strategies to be effective (Bingham et al., 2016), there are not enough proven PL best practices to instruct teachers how to best facilitate PL (Bingham et al., 2016). Researchers and administrators assist this big shift from teacher to learning facilitator by focusing on best practices and aiding teachers as necessary (Tomlinson, 2017). Without access to examples of strategies and experiences that work well or ones to avoid, each teacher must start PL from scratch.

Even once teachers successfully shift their mindsets to becoming learning facilitators and sharing control of the educational process with students, they must also change how they view educational pedagogy through instructional decisions (DeMink-Carthew & Netcoh, 2019; Pane et al., 2017). In a PL framework, teachers must have a constructivist approach to learning where they create opportunities for learners to construct their own knowledge (Nagle & Taylor, 2017). In PL, teachers structure learning activities to decrease supports overtime through scaffolding, they advise their students on the learning process, and they co-plan instructional opportunities for students (DeMink-Carthew & Netcoh, 2019; Pane et al., 2017); doing these tasks well is challenging (Netcoh & Bishop, 2017). Teachers must design open teaching activities which allow for student choice and teacher scaffolding while increasing digital skills (Schmid & Petko, 2019). Teachers scaffold by helping students learn within their zones of proximal development to eventually become independent at the skill or content in question (Wu et al., 2012). Teachers learn how to structure a course to balance scaffolding in a teacher-directed manner and providing choice or empowerment to the students themselves (Bishop et al., 2020; DeMink-Carthew & Olofson, 2020). Professional development for teachers on scaffolding helps them offer more differentiated support (Van de Pol et al., 2014), and teachers also effectively improve their ability to scaffold by offering options to students and listening to feedback from them about the process (Mötteli et al., 2021). Listening to feedback from students and shifting the process as necessary is even more important when partaking in a new educational framework such as PL, and for student feedback to be meaningful, they must understand the purpose of PL thoroughly.

As teachers transition to a constructivist approach through scaffolding, they will begin to scout out resources, instructional items, opportunities, and items of interest for students (Bishop et al., 2020). Teachers must feel positively about voice and choice and systematically include

opportunities for learners to have a say in their learning (Mötteli et al., 2021). Then, teachers curate resources for students such as through playlists or modules (Bishop et al., 2020; Childress & Benson, 2014; Education Elements, 2020) and choice boards or menus (DeMink-Carthew & Olofson, 2020; Luettchau, 2021). Playlists or modules are collections of resources on a topic that students will sift through to decide how best to learn or practice the content based on their learning preferences and prior knowledge (Education Elements, 2020). Teachers must find and integrate a variety of sources into a playlist to provide ample choice for learners (Bishop et al., 2020). When offering choice boards or menus, teachers must create a list of options for how students may demonstrate their knowledge in differing but equitable ways, along with the rubrics for those choices (U.S. Department of Education, 2017). Learners often have a choice for what activities they complete or in other situations the order or pace at which they are completed (Halverson et al., 2015). Teachers also curate resources through the active learning strategies already discussed such as PBL activities and resources (DeMink-Carthew & Olofson, 2020; Lee et al., 2021), flipped instruction resources (Costello, 2017), and gamified coursework (Debs et al. 2019; Ford, 2021; Ofosu-Ampong, 2020). In these active learning strategies, teachers create and facilitate authentic projects, content, or game components such as badges to engage students in learning (Debs et al. 2019; Lee et al., 2021). Teachers spend much more time creating and curating these instructional resources and providing individualized feedback and customized coursework each semester than giving each child the same text at the same time (Bingham, 2019). Through interviews and observations with ELA teachers, the researcher will learn more about what this process of additional curation, feedback, and facilitation looks like and feels like in real life for secondary ELA.

After teachers adjust their mindset about teaching in a PL framework and curate resources and learning materials for students, they then need to work to empower students with their own goals, interests, and ownership over the learning process (Bishop et al., 2020). The teachers must allow students to bring their own preferences into the classroom, advocate for themselves, and demonstrate their varying levels of competence; the teachers must use all this information to customize the course accordingly (Mötteli et al., 2021). In a PL framework, one of the teacher's many jobs is to make learning convenient for learners (Li & Wong, 2021), such as by allowing them to work at their own pace and in their preferred way (Bishop et al., 2020). Students may have control over their learning process as well as their learning objectives (Li & Wong, 2021), which teachers help facilitate through resources and goal setting (Bishop et al., 2020) as well as through conferences analyzing student data (Basham et al., 2016). Teachers use this data and personalized objectives to coach individual or small group projects and tasks (Bishop et al., 2020). This mentoring process proves more effective when continued across multiple years by consistent mentors (Lee et al., 2017). Teachers just beginning PL may not be able to provide feedback on long term mentoring, but they should be able to explain their initial experiences.

Teachers attempting to PL must also scout out resources in the form of educational technology and pair those tools with effective pedagogy (New Media Consortium, 2016). Finding good technology is challenging (Pane et al., 2017); therefore, teachers must be flexible and continue learning about new strategies and technologies to PL (DeMink-Carthew & Netcoh, 2019). As teachers learn new tech tools, they must also scaffold the teaching of these tools to the students as well, especially for assessment (Gašević et al., 2017). This scaffolding of technology helps the students to become more comfortable using the tools in authentic learning

environments (Educause, 2018). For example, many individuals use technology to improve their skills in the real world; so technology may also effectively tutor students (McCarthy, Liu, & Schauer, 2020). Offering a variety of technology tools based on students' comfort levels and availabilities at home helps to address inequities within the classroom (Luettchau, 2021). Luettchau (2021) described her experiences personalizing ELA content in remote and hybrid settings during the COVID-19 pandemic, and she found that providing choice for how to experience the literature or demonstrate learning empowered students to use technology or other resources they had access to at home without feeling ashamed for missing out on what otherwise could have been required activities. As learners make choices about the technology they use to learn and demonstrate their learning, teachers must provide guidance on a variety of tools for many different projects at one time (Bishop et al., 2020). Bishop et al. (2020) in her study of teacher perceptions of PL in 11 Vermont elementary schools described one teacher's struggle with providing feedback on the accuracy of information for the 17 projects going on at any given time. To improve accuracy, teachers must assess to see where the students are at any given point to provide feedback for learning instead of waiting to evaluate them at the end of the project (Bishop et al., 2020). All of these student-focused strategies help to personalize learning for students to improve motivation and autonomy (Alamri et al., 2020). While teachers do not stand in front of the room to lecture and dictate all students' actions throughout class in PL, their job is no easier when they must provide insight and direction in the best way for each student on each project throughout each class.

Student Voice and Choice

As teachers facilitate PL, they often do so by providing students with the opportunity to use voice and choice in their learning process. Voice is having a say in the education process,

and choice is having options in that process (Mötteli et al., 2021). PL is a student-centered educational framework that often offers voice and choice to students (DeMink-Carthew & Netcoh, 2019; Mötteli et al., 2021; Schmid & Petko, 2019; Schmid et al., 2022). Students should be at the center of learning, and they should also have the opportunity to learn actively by constructing their own knowledge (Schmid et al., 2022). Students are diverse (Tomlinson, 2017), meaning they must be offered diverse ways of constructing knowledge through instructional strategies such as voice and choice. Student choice and having a say in PL looks different from individualization and differentiation because the power is shared between the student and the teacher in PL (DeMink-Carthew & Netcoh, 2019; Schmid et al., 2022). Instead of teachers deciding what learning method would be best for each learner, the learners themselves have a say in how they learn and how that learning is assessed. These choices increase engagement (LeGeros et al., 2022), intrinsic motivation, self-efficacy, and more (Walkington & Bernacki, 2020). Teachers themselves also have positive reactions to providing students with voice and choice (Mötteli et al., 2021). Choice additionally increases motivation in ELA specifically (Leuttchau, 2021; O'Loughlin, 2021). Providing voice and choice in ELA through PL strategies empowers learners to improve their decision-making and self-advocacy skills as they assess their own interests and abilities and make decisions about how the learn to communicate and express themselves accordingly.

However, teachers must work diligently to provide voice and choice in purposeful ways. Some school districts advocate for passing ownership of learning to the students through complete freedom in voice and choice, and others do not (Walkington & Bernacki, 2020). For PL to occur, students must have some kind of say in their own learning process (Mötteli et al., 2021; Schmid & Petko, 2019; Schmid et al., 2022). However, too much choice can be debilitating

(DeMink-Carthew & Netcoh, 2019) or make collaboration difficult (Pane et al., 2017). Most schools provide choice over means of learning but not the goals of learning (Halverson et al., 2015; Mötteli et al., 2021) because balancing choice and universal standards is a challenge for teachers (Pane et al., 2017). Even providing choices for the means of learning comes with challenges. For example, if the students are permitted to continue choosing the same types of projects or assessments which are not rigorous for them, their learning will not increase as much as if they chose several kinds of activities to participate in (Walkington & Bernacki, 2020). To proactively prevent students from continuously choosing what they see as the easy way out, teachers may utilize strengths-based PL to benefit student decision-making and learning experiences (McCarthy et al., 2020). Active learning is harder than passive learning, so some students are resistant (DeMink-Carthew & Netcoh, 2019). Students must be coached through the process and provided with feedback and scaffolding along the way. For example, adaptive technology allows teachers to easily adapt curricula based on student choices and paces to scaffold choices for students (Shemshack & Spector, 2020). Overall, teachers must decide how much voice and choice they want or are allowed to provide to learners, and then how they will implement that voice and choice to transform their classroom to a learner-focused environment which positively impacts student learning.

Flexible Learning Environments

One additional component of PL that many school districts cite as part of their PL initiative is flexible learning environments (McCarthy, Liu, & Schauer, 2020; Pane et al., 2017; Shemshack et al., 2021; U.S. Department of Education, 2018). In PL, teachers structure the physical and logistical elements of the learning environment with a focus on student needs (Halverson, 2015; Shemshack et al., 2021). Demonstrating flexibility around student needs is

environments are one of the more common components of PL (Li & Wong, 2021) where students have the autonomy to move as needed to areas, in groups, or in content based on their interests, needs, and goals (Basham et al., 2016; DeMink-Carthew & Netcoh, 2019; Kallio & Halverson, 2020; Li & Wong, 2021). Administrators are usually involved to facilitate flexible physical arrangements of space, seating, or time for students and teachers to take advantage of (Halverson, 2015; National Forum on Educational Statistics, 2019). Teachers facilitate or the students themselves move to individual, small group, or large group workspaces based on the goals and needs of the current project (Basham et al., 2016). This flexibility and the increased access to technology with PL allows teachers to facilitate active learning strategies more easily at any given time (Educause, 2018). The amount of flexibility teachers have depends on the support or directives from administration, so it is important to see how different teachers deal with varying degrees of flexibility in the real world.

Other than flexibility in the physical arrangement of the PL environment, teachers also allow flexible pacing based on learning progressions through CBA (Bingham, 2017; Shemshack et al., 2021). In many PL frameworks, instead of strict due dates or marking periods, teachers structure learning activities to build on one other toward mastery of specific skills in CBA; the pace at which students demonstrate mastery varies (Bingham, 2017; Shemshack et al., 2021). Without a formal deadline, teachers must schedule check-ins with all students at intervals to evaluate progress and provide feedback (Netcoh & Bishop, 2017). Students themselves should learn how to handle this flexibility in the master schedule with help (Halverson, 2015). While Alamri et al. (2020) argue that flexible learning environments are easier in higher education or online learning, even middle schools in states like Vermont have eliminated bell schedules

entirely and work on student-centered practices in FLE (DeMink-Carthew & Olofson, 2020). Increasing flexibility for students takes time, PD, and administrative support (National Forum on Educational Statistics, 2019). The students, teachers, administrators, and other stakeholders will need time and guidance to get used to the increased flexibility and differing expectations.

Perspectives of Personalized Learning

While government initiatives such as the Every Student Succeeds Act (2015) tout PL as important to the future of education, practitioners and researchers of PL are finding implementation challenging and desultory (Schmid et al., 2022) or even dangerous for students (Herold, 2017). Many students enjoy the choices inherent in PL (Alamri et al., 2020; Ford, 2021), but practitioners need access to more research about the process and consequences to ensure quality and safe educational decisions (Bernacki et al., 2021; Herold, 2017; Horn, 2017). Clearly, PL is not a fix-all system for improving every facet of education, and if it is implemented then it must be implemented well (Horn, 2017). This section includes research on the process of shifting to PL, PL and standardized testing, the effectiveness of PL, as well as common criticisms of PL including an overreliance on data and a lack of social interaction.

Shifting to Personalized Learning

Teachers have historically differentiated for individual learner needs (Bernacki et al., 2021), but individualizing the method, content, and assessment for each student through PL is increasing in popularity (McHugh et al., 2020). PL presents a big disruption to a traditional framework for education and teachers and administrators must make the decision to restructure learning based on quality research (Basham et al., 2016; DeMink-Carthew & Netcoh, 2019; Pane et al., 2017). While individual teachers may incorporate individual elements of PL into their classrooms, to truly PL the entire institution must implement the new framework (Walkington &

Bernacki, 2020). School districts often change fundamentally when shifting to PL such as adjusting their school, course, and bell schedules (Bingham, 2019). These institutional shifts drastically affect the learning experience for students, and when faced with issues in PL, some administrators have resorted to prior practices (Bingham, 2016). Considering all the work that goes into shifting to a PL framework, it may be disheartening to go back to the traditional method of education; however, if it really is not working out for a classroom or school, the option to return to prior methods is important to maintain student success.

To implement PL well, teachers must receive professional development, tools, and support (Basham et al., 2016; Tomlinson, 2017). Deciding professional development to administer is difficult because PL best practices are still evolving (McCarthy, Liu, & Schauer, 2020; Pane et al., 2017). School leaders should facilitate a redesign of the physical space of the classrooms and school including new physical resources such as tables for group projects in a shared space (Kallio & Halverson, 2020). Other tools teachers will need access to and professional development for are educational technology tools to facilitate PL such as Google classroom, Kahn Academy, Achieve 3000, and many more (Kallio & Halverson, 2020). Transitioning to PL means an increase in technology usage and teacher technology skills must be strong (Bingham, 2017; Kallio & Halverson, 2020; Nagle & Taylor, 2017). If changes are implemented without buy in by and appropriate training for teachers, ELA skills suffer (Costigan, 2018). This support must extend beyond initial implementation for ongoing aid to ensure teachers consistently implement PL with care and purpose (Horn, 2017). As teachers begin to try out PL tools, they will see what works and what does not work for their content area and students, and administration will need to support their decisions to continuously try new tools until they are successful.

Ongoing professional development should enhance teachers' abilities to consider individual needs, goals, learning preferences, and learning styles (Shemshack & Spector, 2020). In PL, educators shift the efforts of their time in the classroom to have targeted outcomes for learners (Bernacki et al., 2021). To achieve these targeted outcomes of CBA or student-driven goals, scaffolding is crucial (DeMink-Carthew & Olofson, 2020). For example, students should learn to understand learning analytics about their own learning to make informed decisions about their efforts (Gašević, 2017). Eventually, students must also learn how to make choices on their own (DeMink-Carthew & Olofson, 2020). PL requires active learning in which students have a decisive role (Nagle & Taylor, 2017; Tomlinson, 2017). Thus, students also require time and training to work well in a PL framework (Schmid ed al., 2022). Because of the flexible nature of PL and the need for students to make decisions about their learning, students must learn autonomy and self-regulation (Basham et al., 2016; Bingham, 2016; Bingham, 2017; Kallio & Halverson, 2020). Teachers must purposefully use modeling, scaffolding, and other strategies to teach self-regulation skills (Schmid ed al., 2022), self-awareness (DeMink-Carthew & Netcoh, 2019), and autonomy (Bingham, 2016; Bingham, 2017). If students are not taught how to make good choices about their future based on data, they may not choose to study all the content necessary to be successful (Horn, 2017). Even with purposeful teaching of autonomy, PL may require strict discipline to implement because of the increased flexibility which school leaders must weigh against the proposed benefits of PL (Bingham, 2017). Students unused to having freedom to make poor choices will need reminders about their own accountability to be successful in school.

Personalized Learning and Standardized Tests

Teacher, administrators, stakeholders, and citizens have long viewed standardized tests as a key indicator of school effectiveness (Bingham et al., 2016). Administrators regularly evaluate the effectiveness of teachers based on their students' performances on standardized tests (Darling-Hammond, 2015). Schools overall must also perform well on external metrics such as standardized tests to earn money from the state and sometimes even stay in operation (Bingham et al., 2016; Pane et al., 2015), including schools that use PL (Halverson et al., 2015). Thus, schools use standard proficiencies such as the common core state standards (CCSS) for students to work towards to demonstrate learning (Halverson et al., 2015; Pane et al., 2015). Using easyto-grade standardized tests started with technology such as Pressey's automatic teacher (Brass & Lynch, 2020). Since then, PL technology has allowed teachers and administrators to collect more data than ever in preparation for standardized tests (Brass & Lynch, 2020). Despite the availability of data, aligning PL with standardized tests and other traditional institutional practices is a key challenge (Bingham et al., 2016; Han et al., 2014). In PL, students may not follow traditional grade-level steps nor school timelines, and they usually use multiple ways to demonstrate their learning (Bingham et al., 2016). Conversely, students are grouped by age, grade level, and semester to take standardized tests, which offer a small number of options for how to demonstrate their learning. Administering a standardized test, such as the Keystone Literature Exam in Pennsylvania, every January and May while also offering students multiple pathways and timelines for how to interact with that ELA content is challenging for teachers to navigate. Thus, implementing PL and administering standardized tests is hard on teachers (Han et al., 2014), but the effort may be worth the struggle if test results improve because of PL. In 2019, Zimmerman and Kuhlman found that PL had an ambiguous effect on overall standardized

tests after students used PBL to learn or practice mathematical content. Additionally, Lee et al. (2021) compared high- and low-performing schools for how they implemented PL, and they found that the higher-performing schools implemented PL more thoroughly and with more technology. While those two studies demonstrate promise for the effects of PL strategies on standardized test scores, the field remains ultimately unclear as to the specific effects of PL on achievement on state-wide standardized tests (Lee et al., 2021). Understanding teacher experiences while incorporating PL strategies and preparation for standardized tests will help clarify the process that teachers must go through to merge these two seemingly divergent trains of thought on education.

The Effectiveness of Personalized Learning

While some critics argue that PL is overhyped with a dearth of research on its effectiveness (Bingham et al., 2018; Herold, 2017), an ever-increasing number of researchers have been diligently working to understand the effects of PL in the classroom. With a goal to allow students to move at individualized paces through content using the methods which help each student individually, PL has demonstrated a statistically significant effect on learning outcomes (Major et al., 2021). For example, researchers studying five different districts of PL schools in 2016 found an increase of 130% in reading for 36,000 K-12 students (Education Elements, 2017). Likewise, McCarthy et al. (2020) found statistically significant improvements in language usage and reading on MAP assessments when they compared students in PL framework to those in a traditional school. Baye et al. (2019) also found that PL improves literacy when students are able to choose texts of interest (while still within their ZPD) because they were more motivated to read them. When these texts were within the students' ZPDs, they

learned more quickly and successfully (Baye et al., 2019). PL also increases achievement and interest for in other subjects such as mathematics (Bernacki & Walkington, 2018). Overall, PL has the potential to provide deeper learning (Alamri et al., 2020), increase growth (Basham et al., 2016), and increase achievement (Alsobhi & Alyoubi, 2019). In PL, teachers provide choices to students to cultivate their interest in the material which increases growth and achievement (Alsobhi & Alyoubi, 2019). These choices also increase autonomy (Alamri et al., 2020; Deci & Ryan, 2000), competence (Alamri et al., 2020; Netcoh & Bishop, 2017), motivation (Alamri et al., 2020; Deci & Ryan, 2000; DeMink-Carthew & Olofson, 2020; Shemshack & Spector, 2020; Walkington & Bernacki, 2020), engagement (Deci & Ryan, 2000; DeMink-Carthew & Olofson, 2020; Shemshack & Spector, 2020), understanding (Shemshack & Spector, 2020), persistence (Bernacki & Walkington, 2018), responsibility (Netcoh & Bishop, 2017), and self-efficacy (Walkington & Bernacki, 2020). Responsibility and competence on their own also improve selfefficacy (Netcoh & Bishop, 2017). These increases in traits like engagement and motivation through PL overall increase learning (Shemshack & Spector, 2020). Increase in interest through PL such as context PL also makes learning more efficient (Bernacki & Walkington, 2018). To illustrate the effect of PL on performance, in a survey of 72 learner-centered schools, high performing schools used more PL such as with technology than the lower performing schools (Lee et al., 2021). While research on PL is still developing, researchers indicate generally positive results such as an increase in learning efficiency (Bernacki & Walkington, 2018). Administrators and teachers must pay attention to how schools implemented PL to achieve these positive results and then cater the process to their own school climate and student demographic by trying the methods they think will work the best, and even then changing them as necessary.

While these results are generally positive such as the 130% increase in reading ability from switching to PL as found by Education Elements in 2017, not all researchers of PL have found improvements in learning from the framework. Despite the necessity of PL for students with individualized education plans (IEP's) (Basham et al., 2016), PL is not as effective for other minority groups such as students who are socioeconomically disadvantaged or English language learners (McCarthy, Liu, & Schauer, 2020). Likewise, McCarthy, Liu, and Schauer (2020) found that adaptive learning increased reading comprehension for struggling readers but had no effect on average readers regardless of their minority status (McCarthy, Liu, & Schauer, 2020). Bernacki and Walkington (2018) also discussed no increase in performance when teachers implemented PL shallowly even though students valued the focus on interest and preference. Considering the vast amount of effort to implement PL, administrators must seriously weigh the proposed small or even medium increases in achievement (Bernacki & Walkington, 2018). Considering the context of those results in comparison to the individual school district considering a shift to PL helps administrators make more informed decisions, such as by reading about experiences similar to the context of their own schools.

Overreliance on Data

These potential increases in achievement from PL are often brought on by technology, which some critics argue depersonalizes the learning process or has even more harmful effects on students (Brass & Lynch, 2020). A simple criticism of technology use for PL is that it causes students to get off task (Bingham, 2017). A more serious criticism that teachers worry about is that educational technology companies use the wrapping of PL to lobby policy makers for monetary gain (Dishon, 2017; Shemshack & Spector, 2020). For example, government agencies mandate state tests to demonstrate learning, so some technology tools are just focused on

improving scores on those tests alone and not actually improving authentic learning (Roberts-Mahoney, 2016). PL also introduces a greater danger of using data at the detriment of students such as by not enrolling a kid in a course or school who will probably fail or giving too many resources to that child instead of others (Clow, 2013). Additionally, corporations may attempt to access the data collected and curated through educational technology for corporate gain which introduces issues of privacy (Herold, 2017; New Media Consortium, 2016; Johnson et al., 2016; Roberts-Mahoney, 2016). The learning analytics that use this data to make decisions about students increase student agency but may oversimplify the data too much, so decisions are not as well informed as they seem (Tsai et al., 2020). Teachers understand more about the nuances, complexities, and backgrounds of each student than the learning analytics, but they take more time to make educational decisions about each child individually; teachers fear their jobs are being taken away by machines (Shemshack & Spector, 2020). These machines make seemingly objective decisions on data alone, which instead should be understood within the whole social context (Dishon, 2017; Tsai et al., 2020). Teachers are skilled at considering the social context and using technology data as part of that context but not the entire picture.

Other critics argue that this reliance on data through algorithms in PL is too behavioristic or stimulus-response; students participate in behaviorist practice with reinforcement instead of interpretation (Dishon, 2017; Gašević et al., 2015; Herold, 2017). These behavioristic tendencies may cause students to prepare exclusively for work force skills (Dishon, 2017) instead of being fulfilled members of a culturally rich society (Roberts-Mahoney, 2016). For ELA skills in particular, use of technology demonstrated no impact on literacy (Baye et al., 2019). With new initiatives like PL, administrators ask ELA teachers to use pedagogy they may not support such as to master standardized tests (Costigan, 2018). For example, administrators at some schools

encourage ELA students to almost exclusively pull facts to support arguments (Costigan, 2018). Skills taught through stimulus response technologies are unlikely to meaningfully improve students' lives in the real world (Herold, 2017). ELA teachers in particular must weigh the tenets of PL with success in their content area by personalizing some facets of reading, writing, speaking, and listening, but still having larger group discussions on common topics and interactions on important readings. Seeing how some example ELA teachers balance their content area-specific skills with standardized test preparation in PL is important for all teachers working in the age of standardized tests.

Lack of Social Interaction

Another common criticism of PL is the lack of social interaction inherent when students spend their time on disparate activities at disparate paces and in disparate places (Alamri et al., 2020). An objective of individualizing instruction may inadvertently lead students to feeling isolated or lacking positive social interactions when they are consistently working separately from peers (Alamri, 2020; DeMink-Carthew & Olofson, 2020; Dishon, 2017). For example, students feel a lack of relatedness in PL and when working online (Alamri et al., 2020). Relatedness has been proven to increase motivation (Alamri et al., 2020) and engagement (Bernacki et al., 2021). In one of the most cited theories for PL, self-determination theory, Deci and Ryan (2002) highlight the need for three pillars of education: competence in a social environment, autonomy, and relatedness to others. Likewise, Vygotsky (1978) argues for the importance of social learning such as through modeling and a more knowledgeable other in his SDT. However, researchers have demonstrated little evidence regarding what social or emotional requirements should be considered when personalizing learning based on individual needs (Shemshack & Spector, 2020). Social emotional learning is often entirely left out of digital

coursework or pedagogy (Basham et al., 2016). In two studies of PL in the real world, researchers found a lack of peer collaboration (DeMink-Carthew & Olofson, 2020) and overt focus on independent work (DeMink-Carthew & Netcoh, 2019). DeMink-Carthew and Netcoh (2019) argue that teachers must purposefully build in peer interaction and feedback in a PL framework otherwise students struggle with exclusive independent work. Working separately from peers may affect social interaction in the classroom, which is particularly important in discussion-based courses such as high school ELA (Schieble et al., 2020). In ELA classrooms in particular, students must practice speaking and listening skills by interacting with their peers about content knowledge and important topics; ELA teachers how PL must determine how to balance this social interaction with the individualized instruction. ELA instructors must work to provide learners individualized educational opportunities through personalization as well as interactions for socialization, and those instructors looking to personalize learning well need to see examples of what it looks like

Social Learning

Within learning spaces, students have social goals and needs as well as academic ones (Ryan & Patrick, 2001). The social elements of education come together to build community, and the nature of this community redefines classroom learning (Shelton et al., 2020). Community is the context and characteristics of a group based on location, cultural norms, and the set of relationships among members for trust, safety, caring (Shelton et al., 2020), and feelings of connectedness (Brown & Pederson, 2020; Wang et al., 2022), belonging (Brown & Pederson, 2020; Osterman, 2000; Shelton et al., 2020), and cohesion (Wang et al., 2022). While teachers cannot affect the location or cultural norms of their geographic area, they are able to affect the relationships within the classroom (Parrish et al., 2021). Teachers are responsible for structuring

the interactions within the learning space, and those interactions foster psychological and emotional connection which further improves the community, and that community allows for richer interactions in a cycle (Wang et al., 2022). Psychological and emotional connections also set up the foundation for belonging, which means that the group is important to the individual and the individual is important to the group (Osterman, 2000). When the group is important to the individuals involved in the group, they are more likely to create a cooperative climate to collaboratively do well on tasks, which is cohesion (Wang et al., 2022). This cohesiveness also helps students connect for common goals and expectations for learning (Parrish et al., 2021; Wang et al., 2022). This cohesiveness of class community leads to a positive and satisfactory course climate (Parrish et al., 2021). ELA teachers build class community and cohesiveness through reading and discussing common texts, partner or group work and practice, peer feedback, and class presentations. These important aspects of ELA should not sacrificed in a PL framework.

Understanding how community affects the learning process is important for teachers to foster positive learning environments (Ryan & Patrick, 2001). Learning is social (Bandura, 1977; Dishon, 2017), and classrooms are social places (Ryan & Patrick, 2001). Kunc (1992), explained how society has historically viewed achievement as more important than community; therefore, more instructional and research focus has been on increasing scholastic achievement. However, a strong class community positively impacts students (Brown & Pederson, 2020). Although Parrish et al. (2021) found a weak relationship between community and the perception of learning, other researchers have found positive effects of a strong class community for both students and teachers (Brown & Pederson, 2020; Rovai, 2002). The sincere care of a community affects students long after the interaction by making them feel valued (Garcia et al., 2021).

Additionally, being a part of a community minimizes anxiety about isolation by promoting a sense of belonging (Wang et al., 2022). A class community built on interactions between teachers and students, or students and other students increases motivation and academic success such as through active learning and prompt feedback (Brown & Pederson, 2020; Chickering & Gamson, 1987). These interactions increase motivation and engagement through feelings of belonging and relatedness (Ryan & Patrick, 2001). These interactions also help students be emotionally and socially competent to live and work successfully in society after graduation (Garcia et al., 2021; Roberts-Mahoney, 2016). In addition to emotional and social competence, relatedness increases feelings of security, worth, and love which allow for psychological development and well-being (Osterman, 2000). A strong class community benefits students during school and afterward (Brown & Pederson, 2020). ELA teachers should propagate positive classroom community for the sake of their content area itself as well as the wellbeing of the students within the class.

Fostering a positive class community is the responsibility of the course instructor to include relationship-building techniques, especially when personalizing learning (Parrish et al., 2021). Class community is dynamic, so it grows stronger or weaker over time (Kibler et al., 2019). Teachers set up social norms and structure interaction in their rooms for students (Ryan & Patrick, 2001), and the teacher role itself is then affected by students and their interactions (Kibler et al., 2019). Teachers should collaboratively design care within the classroom through interactions with students for an authentic and stronger sense of community (Garcia et al., 2021). Even relationships built on care differ from person to person, and instructors must foster positive relationships within context (Garcia et al., 2021). The ability for instructors to embrace the unique interests of each student from these interactions helps forge community within a PL

environment (LeGeros et al., 2022). One secondary school in Vermont capitalized on the unique interests of each child to facilitate a school-wide Genius Hour, which the students felt built community within their school (LeGeros et al., 2022). Introducing novel instructional techniques such as Genius Hour may be necessary to build community with a PL framework, because normal community techniques may not work when students interact online (Parrish et al., 2021). Getting students to interact in person is more effective than online interactions such as through Twitter or other social media (Brown & Pederson, 2020). This lack of community when students spend time online might come about because teachers and researchers often leave socialemotional learning out of digital spaces (Basham et al., 2016). If PL teachers do not turn to online methods to build community, they must take advantage of the time when students are in brick-and-mortar settings. While whole-group instruction is comfortable for teachers, it is not PL which often necessitates sacrificing whole-group instruction for individual relationships (Bingham, 2017; Kallio & Halverson, 2020). Indeed, PL has the danger of isolating students (Dishon, 2017) or allowing for lurking which is a lack of social presence that undermines cohesion (Wang et al., 2022). This lack of belonging even leads to poor behavior (Osterman, 2000). Overall, the positive relationships from a class community are necessary for student success but are difficult to foster within a PL framework (Kallio & Halverson, 2020). Working to understand the experiences of ELA teachers striving to use a PL framework well, which would include maintaining social interaction, is important for other ELA teachers and similar content area teachers to see what has worked well for some, or the lessons those teachers have learned from already.

Teacher-Student Interactions

The easiest relationship to foster within a PL framework is the teacher-student relationship (LeGeros et al., 2022). When personalizing learning, teachers get to know students better by learning about their interests which helps build better relationships (Kibler et al., 2019; LeGeros et al., 2022; Murphy et al., 2016; Netcoh & Bishop, 2017; Wright et al., 2019). To be supportive of individual students in PL, teachers must curate quality interactions and relationships (Schmid et al., 2022) which they have time to do since PL necessitates more oneon-one interaction than whole group instruction (Pane et al., 2017; Wright et al., 2019). Teacher relationships affect student achievement and motivation (Ryan & Patrick, 2001), with higherperforming PL schools boasting better relationships with students by maintaining mentor relationships longer (Lee et al., 2021). These nonparental role models are important for students' SEL growth (Ryan & Patrick, 2001). Consistently participating in learner-focused teaching strategies as positive role models shows students that their teachers are caring, friendly, understanding, dedicated, and dependable (Ryan & Patrick, 2001). Teachers are better role models in PL because they have less stress to cover the curriculum and thus are able to spend more time building relationships by mentoring individual students rather than lecturing content (Netcoh & Bishop, 2017). This consistent communication through mentoring improves the connectedness between teachers and students (Parrish et al., 2021). Teachers mentor students in PL by scheduling frequent check-ins and time for reflection (Garcia et al., 2021), and by collaborating on PLPs and other facets of the learning process (Halverson et al., 2015). Teachers should also model the learning process (Bandura, 1977), scaffold instructional activities (Basham et al. 2016), and provide prompt feedback to encourage and build community (Brown & Pederson, 2020; Kibler et al., 2019; Parrish et al., 2021). Teachers should provide feedback and

validation to reinforce good behaviors and habits (Kibler et al., 2019) to provide guidance for the independent work of PL (Schmid et al., 2022), and to help students feel comfortable making mistakes (Ryan & Patrick, 2001). In an ELA environment, this kind of personalized tutoring improves literacy (Baye et al., 2019) and is important for teaching argumentative writing (Lin et al., 2020). So, relationships between teachers and students are often actually stronger in PL than in a traditional learning framework, which benefits both the teachers and students (Brown & Pederson, 2020). These improved relationships are heartening for those working to maintain or even improve social interaction in PL but they cannot be the only type of relationships students curate in school.

Peer-to-Peer Interactions

While positive teacher-student relationships help students in many ways, the Modern Language Association (MLA) (2008) lists both independent and collaborative peer skills as equally important for English work. A positive class community improves dialogic engagement, and discourse between peers helps build that community (Shelton et al., 2020). In fact, discussion is a core element of ELA (Alston et al., 2018). These interactions between peers in ELA classrooms push students to justify and clarify their ideas so the audience understands (Alston et al., 2018; Ryan & Patrick, 2001). In ELA, students learn to consider other perspectives and interpret their own understanding of texts through transactional reading (Costigan, 2018). Discourse improves literacy skills and the ability to construct knowledge, improves relationships, and increases awareness of self and others (Alston et al., 2018). Thus, in ELA and other content areas, learning occurs through peer collaboration (Osterman, 2000). Good PL includes facilitating peer-to-peer interaction for peer support and the ability to learn from one another (Li & Wong, 2021; Porath & Hagerman, 2021). Teachers facilitate interactions with peers to show

respect and support, increase learning, and/or allow for competition or comparisons (Ryan & Patrick, 2001). All kinds of peer interactions affect student growth, adjustment, and achievement (Ryan & Patrick, 2001). ELA teachers must include peer interaction to benefit the peers academically, socially, and emotionally.

Peer interaction positively affects students and is vital to success in PL (Li & Wong, 2021). To have good relationships in PL, students must feel like they belong (Kibler et al., 2019). To minimize feelings of isolation in PL (Dishon, 2017), the opportunity to discuss content and student work with peers builds relationships (Alamri et al., 2020; Parris et al., 2021). Teachers also positively affect student success by allowing students to learn from one another. For example, imitating peers who model appropriate skills increases self-efficacy (Bandura, 1977). Peer tutoring is helpful for writing (Yeh, 2017), and blogging collaboratively improves growth (Mitchell et al., 2018). Additionally, English language learners (ELL) must work with peers to improve academic and linguistic learning (Kibler et al., 2019). Many facets of learning increase when students get support from their peers (Rovai, 2002). However, Pardo et al. (2019) argue that teachers cannot rely on peers alone for providing feedback, because students must hear the expertise of the teacher throughout the course to truly learn as much as possible. Determining how and when to allow all of these kinds of feedback to help students learn is an art.

To facilitate peer interaction, teachers must carefully curate peer learning opportunities because even the CCSS necessitate peer feedback (Bishop et al., 2020). Teachers must be purposeful with their pairings, so both peers provide and accept constructive feedback (Kibler et al., 2019; Porath & Hagerman, 2021). In PL, teachers should allow students to provide personalized peer feedback and learning opportunities (Alamri et al., 2020; Debs et al., 2019) such as through blogging (Turvey & Hayler, 2019) or other online interactions (McHugh et al.,

2020). For example, when students are working online, discussion boards help them build relationships and learn from peers (Parrish et al., 2021). However, face-to-face collaboration is more meaningful than online interactions alone (Mosley et al., 2017). Even online interactions are better than no interactions, which may happen in PL if the instructor does not purposefully include opportunities for peer collaboration (Dishon, 2017). In DeMink-Carthew and Netcoh's (2019) study of PL at one middle school in Vermont, the students reported feeling frustrated in PL because they were all working on separate projects with no interaction with one another. This lack of peer interaction leads to a lack of connections (Parrish et al., 2021) and a lack of community (Wang et al., 2022) which negatively affects students. ELA teachers must work hard to provide opportunities for building and then maintaining positive connections and community within their classrooms.

Cooperative Learning

One-on-one peer relationships help students, but they should also work collaboratively in teams to learn 21st-century skills including the ability to collaborate and socialize (Dishon, 2017). In PL, some teachers use a team-based learning (TBL) active learning technique where students work collaboratively towards a goal such as solving a problem using course content with both individual and group accountability (Erbil, 2020; Parrish et al., 2021). With TBL, students come to class prepared to work through group interaction (Parrish et al., 2021). Cooperative learning techniques such as TBL differentiate PL from other methods of customizing learning such as individualized instruction (Schmid & Petko, 2019). Team interactions such as through a cohort or TBL improve connectedness (Parrish et al., 2021), student success, attitude, and motivation (Erbil, 2020). Cooperative learning ensures students participate in active learning to construct knowledge (Erbil, 2020). All group work is not better

for students, though, because Lee et al. (2021) did find that Adequate Yearly Progress (AYP) was better for schools that focused on independent PBL instead of group PBL in a TBL setting. Although students may increase their academic skills in independent work, they still need some social interaction. Teachers in PL must determine how to do both.

In ELA classrooms, the use of differentiated collaborative groups improves the learning of argumentative writing (Lin et al., 2020), and has a stronger effect on reading than the personalization of technology (Baye et al., 2019). To structure teams, teachers should use data to strategically place students in diverse groups (Bingham, 2017; Bingham, 2019; Parrish et al., 2021). While some researchers saw greater effects of larger, more sustained groups (i.e., Parrish et al., 2021), other researchers favored smaller, more flexible groups based on topics or goals (Kallio & Halverson, 2020; Netcoh & Bishop, 2017; Pane et al., 2017), or even self-organized groups (Halverson et al., 2015). The danger of allowing students to self-group is that the groups often end up being homogenous, so students learn less from one another than if the groups had been teacher-assigned (Kibler et al., 2019). One instructional model that allows for socialization within PL is the station rotation model, sometimes called the hybrid model, where students move around the classroom in purposeful groups to stations that allow for independent, group, or teacher-led activities respectively (Kallio & Halverson, 2020). Teachers may explore many options for how they incorporate socialization through teacher-student relationships, peer-peer relationships, and group relationships through TBL to build community within a PL framework.

Summary

The purpose of this transcendental phenomenological study was to understand the lived experiences of secondary English language arts teachers implementing personalized learning in Southeastern Pennsylvania. Students need both personalized support and social interaction for

successful learning to occur (Vygotsky, 1978). SDT formed the framework for this study because Vygotsky's focus on using social interaction within a culture, including from more knowledgeable others, to help students learn within their ZPD demonstrates a clear need for both social learning and PL within ELA courses (Vygotsky, 1978). PL is a student-focused method of structuring learning by providing options for experiencing content, practicing skills, and demonstrating learning which helps students to learn within their ZPDs (Childress & Benson, 2014; Bernacki & Walkington, 2018). ELA teachers must work to maintain individualized learning for students within their ZPDs without losing the social interaction that is important for student growth and wellbeing.

While researchers have studied PL for decades (i.e., Poland et al., 1982)—including research on the effectiveness of PL (Patall et al., 2010; Rutledge et al., 2015), challenges of PL (Bingham et al., 2016; Dishon, 2017; Ferguson, 2012), components of PL (Alamri et al., 2020; Basham et al., 2016), specific schools or content areas using PL (Nagle & Taylor, 2017; Netcoh & Bishop, 2017; Walkington & Hayata, 2017), and even some specific ELA-focused strategies (Ford, 2021; Luettchau, 2021; O'Loughlin, 2021)— a gap in the literature exists for how ELA teachers use PL in general, and how they do so without sacrificing social interaction. Because ELA, especially at the high school level, is more focused on social interaction than other content areas such as mathematics, incorporating PL may be more nuanced than existing studies portray (Alston et al., 2018; Sperling & Woodlief, 1997). This study aimed to close the gap in the literature to understand better how English teachers in Southeastern Pennsylvania personalize learning to appropriately challenge and engage each student in the classroom while simultaneously maintaining the social interactions inherent in the skills of reading, writing, and

speaking (PDE, 2014). Understanding the experiences of teachers currently trying to PL in ELA demonstrates the successes, challenges, and learning experiences of the process.

CHAPTER THREE: METHODS

Overview

The purpose of this transcendental phenomenological study was to understand the lived experiences of secondary English language arts teachers implementing personalized learning in Southeastern Pennsylvania. Qualitative researchers strive to explore the meaning behind a social or human problem (Creswell & Creswell, 2018; Creswell & Poth, 2018). The research was a qualitative study design that examined transcendental phenomenological research to discover teachers' experiences personalizing learning in ELA. Understanding teachers' lived experiences supporting interactions in a PL environment might help other teachers or administrators tasked with implementing PL to see examples of what the experience of personalizing learning in ELA classes is like. Chapter Three includes an explanation of the transcendental phenomenological study design, the role of the researcher, and the methodological approach. The procedures for participant selection, instrumentation, and data collection are also discussed. Chapter Three also includes an explanation of the techniques used to guarantee the trustworthiness of the research. The chapter concludes with a review of the significant points and a plan for data analysis.

Research Design

A qualitative, transcendental phenomenological study method was used for this study to describe and understand the experiences of secondary ELA teachers as they worked to personalize learning for their students. Qualitative research is a form of inquiry that allows researchers to focus on meaning in individual situations and express the complexity of those situations (Corbin & Strauss, 2008; Creswell & Creswell, 2018; Creswell & Poth, 2018). Because qualitative researchers focus on making and understanding meaning, they orient their studies through theoretical or interpretive frameworks and acknowledge their personal

assumptions (Creswell & Poth, 2018). They typically endeavor to understand participant experiences in their own settings through emerging questions and other procedures, inductively build themes based on the data they collect, and verify their findings through deduction (Corbin & Strauss, 2008; Creswell & Creswell, 2018; Creswell & Poth, 2018). Qualitative researchers strive to explore and understand the meaning that individuals or groups assign to a social or human problem (Creswell & Creswell, 2018; Creswell & Poth, 2018). The researchers using qualitative studies explore problems within their natural settings and provide a voice to those experiencing them to describe the richness of experience in human perception (Denzin & Lincoln, 2008; Yin, 2016). This study was likewise oriented to provide a voice to teachers working to curate meaningful PL experiences within ELA curricula as they faced the problem of how to implement PL well. The researcher strove to explore and understand the experience of implementing PL in secondary ELA through interviews, observations, and document analysis in order to collect data and inductively build themes.

Within the parameters of qualitative research, researchers focus on one of several approaches to orient their studies (Creswell & Poth, 2018). This study was guided by a phenomenological research design. Moustakas (1994) explains phenomenology as describing what phenomenon participants experienced and how they experienced it. According to van Manen (1997), in phenomenological research the researcher explores the experiences around a particular phenomenon the study participants have lived firsthand; he defines phenomenology as "the study of how things appear, show, or give themselves in lived experience or in consciousness" (p. 777). The researcher is a human instrument to elucidate and synthesize the essence of the study participants' perceptions of their lived experiences with a phenomenon (Creswell & Creswell, 2018). Researchers in phenomenological study designs attempt to capture

the universal essence of a lived experience as it was experienced without theorizing about it (Husserl, 2014; van Manen, 1990; Moustakas, 1994). Heidegger (1962) likewise defines phenomenology as an approach to capture the essence of an experience in the way it is experienced. Eidetic, or essence, analyzes the essence of conscious perception of individual experiences (Padilla-Diaz, 2015; Sokolowski, 1965). Phenomenological research began based on the abstract philosophies of German mathematician Husserl (1970) such as the intentionality of consciousness which posits that reality only exists based on consciousness of the objects and experiences therein (Sokolowski, 2000). Hegel (2007) added that conscious knowledge comes from the perceptions and meaning ascertained from the person's experiences (Becker, 2018). Husserl, Kant, and Hegel all helped pave the way for phenomenological researcher in the early twentieth century (Bevan, 2014; Bruzina, 2004; Cypress, 2019). Other researchers have focused on phenomenology through other lenses such as human sciences (van Manen, 2014) and psychology (Moustakas, 1994). This study was guided by phenomenological methodology because of the focus on the lived experiences of secondary ELA teachers all experiencing the same phenomenon: the duality of teaching content in both personalized and socialized ways at the same time. The teachers' intentionality regarding their description of their experiences of personalizing learning helped create a description of the essence of conducting PL in ELA.

There exist many kinds of phenomenological research designs, and this study was conducted using a transcendental phenomenology. In another popular phenomenological research design, hermeneutic phenomenology, the interpretations of the researcher about the phenomenon are important to the research process (van Manen, 2014). Conversely, transcendental phenomenology is the effort to understand the basic essence of lived human experiences free from the influence of personal assumptions (Husserl, 1970; Moustakas, 1994);

the researcher transcends or suspends prior knowledge to understand a phenomenon more fully (Merleau-Ponty, 1956). Transcendental phenomenology is different from other types of phenomenological research because of the researcher's efforts to set aside any biases or preconceived notions about the phenomenon in question—called using epoché (Moustakas, 1994). The researcher sets aside personal perceptions to illustrate the phenomenon in question without bias in a process called epoché or bracketing the researcher's biases away from the experience itself with fresh eyes (Moustakas, 1994; Padilla-Diaz, 2015; Sokolowski, 1965). Part of quality transcendental phenomenological reflection is bracketing and reduction to minimize bias about the essence of the experience as described by those who have actually experienced it (Moustakas, 1994); perfectly separating one's personal opinions and biases from an understanding of a phenomenon is impossible but still important to strive for. Epoché allows space for the opportunity to uncover phenomenological meaning and reduction pushes for that meaning to appear (van Manen, 2017). Epoché, bracketing, and reduction all allow the researcher to put aside his or her own perspective and search for the subjective elements of consciousness which surpass an understanding of consciousness from a single viewpoint (Padilla-Diaz, 2015). As an ELA teacher who does not work in a PL framework, the researcher used epoché to neutralize prior opinions about personalizing ELA content to withhold preconceptions about the experience and used reduction to focus intentional consciousness on the participants' experiences to consider the phenomena from their perspectives to allow a rich description of their lived experiences.

This study was oriented to understand the rich experience and personal meaning of ELA teachers as they worked to personalize learning and made the decisions they did within their contexts. The researcher used this transcendental phenomenological study to describe the lived

experiences and personal meanings of ELA teachers as they personalize learning in three different pseudonymous secondary located in Southeastern Pennsylvania, whose superintendents tasked teachers with personalizing learning in some way and to some degree: School One ("Strategic Direction," n.d.), School Two ("Mission, Vision, & Goals," n.d.), and School Three ("Program of Studies," n.d.). The method and degree of personalizing varied from school to school, but all systems included at least some intentional effort to customize learning for individual students. Different methods of PL included a focus on one or more PL components such as PLPs, CBA, adaptive technology, or flexible learning environments (McCarthy et al., 2020). The degree of personalizing means that administrators could completely redesign the entire school to change the schedule and layout, or it could be a small shift in one lesson in one classroom (Mötteli et al., 2021). My collection of data regarding these experiences focused on the experiences of ELA teachers promoting interaction within a PL framework. The findings of this study support a better understanding of the experiences of teachers as they strive to invoke meaningful interactions in a personalized setting.

Inductively analyzing data from individual settings to build themes and then comparing those themes across settings better informed me about the variety of experiences teachers face when implementing PL. Researchers use a purposive sampling method to select multiple settings to ensure that all participants have experienced the phenomenon in question (Creswell & Poth, 2018; Patton, 2015). Researchers use purposive sampling to ensure that their participants will provide information rich cases (Patton, 2015). My selection of the settings for this study was based on purposive sampling to ensure that the participants within the settings had experience implementing PL to broaden my understanding of the experiences of facilitators of PL.

Phenomenological researchers work to consistently focus on the noema, or what is thought

about, related to the phenomenon at any given time, through noesis, or thinking about or considering (Peoples, 2021). Systematically working through the phenomenological research helped me conduct noesis about the experience of personalizing learning, the noema of this study.

Research Questions

Research questions provide direction for the method of inquiry in a study to restate the purpose in more specific ways (Creswell & Poth, 2018). Research questions are open-ended to broadly guide the inquiry. Researchers typically use one central research question (CRQ) which revisits the purpose and then a few sub questions to touch on facets of the CRQ without becoming too overwhelming to the researcher (Creswell & Poth, 2018). In phenomenological research studies, quality research questions must focus on lived experiences instead of theoretical explanations (Colaizzi, 1978). This study of the experiences of secondary ELA teachers incorporating interactions in a PL framework was guided by the following questions:

Central Research Question

How does personalized learning affect the lived experiences of ELA teachers?

Sub-Question One

How do secondary ELA teachers experience the use of specific strategies to support personalized learning?

Sub-Question Two

How do secondary ELA teachers maintain meaningful social interaction within a personalized learning framework?

Sub-Question Three

How do challenges affect the experiences of secondary ELA teachers personalizing learning?

Setting and Participants

The settings for this transcendental phenomenological study were three public secondary schools in the Southeastern region of Pennsylvania, ranging from small to large and rural to suburban. Purposive sampling ensures that selected participants, within the selected settings, experienced the phenomenon in question and are able to describe their lived experiences (Creswell & Poth, 2018). Participants were purposively selected from ELA teachers working to personalize learning within the context of their school districts, which were systematically incorporating a specific method of PL. The chosen school settings and profiles of teachers who will participate in this study will be articulated in this section.

Setting

The setting is the context in which the participants experience the phenomena (Creswell & Poth, 2018). Studying participants with diverse characteristics from divergent settings makes describing the overall essence of the experience more difficult in phenomenological research (Creswell & Poth, 2018). However, no two schools implement PL in precisely the same way (Lee et al., 2018; Mötteli et al., 2021; U.S. Department of Education, 2017); therefore, studying the experiences of learning facilitators in different secondary schools necessitates a thorough description of each one. The settings for this study were selected because the school districts demonstrate implementation of PL. The researcher researched online for mission statements, goals, values, or other core belief systems on school websites until at least eight school districts within a geographic area (southeastern Pennsylvania) that mentioned PL or at least one aspect of PL as necessary to the school values were found. The 10 participants all came from these three

schools where administrators provided permission to conduct research and because the context of their teaching experiences allowed for the process of teaching PL in ELA. School districts define PL in multiple ways, implement the framework to varying degrees, and use numerous aspects or components (Shemshack & Spector, 2020). Therefore, developing a strict rationale for what constitutes a school that personalizes learning is challenging. All high schools selected for this study used at least some effort to personalize learning according to their district websites: School One ("Strategic Direction," n.d.), School Two ("Mission, Vision, & Goals," n.d.), and School Three ("Program of Studies," n.d.). Other school districts hoping to implement at least some aspect of PL may be able to learn from the experiences of these typical teachers.

To find school districts that use a PL framework, the researcher checked school district websites and educational intermediate unit resources for lists of schools incorporating PL (sometimes called individualized learning, customized learning, or mass customized learning). All school district initiatives highlighted at least one component of PL: School One ("Strategic Direction," n.d.), and School Two ("Mission, Vision, & Goals," n.d.), and School Three ("Program of Studies," n.d.). School One and Three are from the same counties and have been focusing on personalizing learning longer than School Two, but all three districts have similar attitudes towards the framework at this time. This study collected data from 10 participants who teach ELA at one of the three settings. Prior to final participant selection, the researcher asked the principals to verify that all teachers implement PL to at least some extent. Because all school districts indicated PL to be a district priority, all teachers were most likely working to uphold district values such as PL in some way, and therefore any ELA teachers who agreed to participate in the study at these schools could be participants, up to a total of 10 teachers. However, if the principals indicated that not all teachers were implementing PL, the researcher

asked them to suggest which ELA teachers were working to implement PL within their classrooms. Attaining saturation means that additional participants do not offer new information on a topic and demonstrates that the researcher is able to confidently analyze themes from the existing data (Corbin & Strauss, 2008). The researcher did not have the resources available to study every ELA teacher in all school districts well, but the researcher needed to analyze the experiences of enough of them to attain saturation of data about PL.

School One High School is part of a large, suburban school district in southern Pennsylvania. School One is a public, coeducational, day school, and in the school year 2020– 2021, the school had 950 students enrolled creating a student-teacher ratio of 13.57 to 1 (NCES, 2021). This school has one principal, two assistant principals, and seven faculty in the ELA department. Students in the school are 77.5% white, 12.7% Hispanic, 1.8% black, 4.1% Asian, and 3% two or more races (NCES, 2021). 33.9% of the school qualifies for free and reduced lunch (NCES, 2021). In the district "Strategic Direction" document, this district lists one aspect of the future of learning as having personalized learning opportunities and a vision for customizing structures to support all learners in personalized ways ("Strategic Direction," n.d.). In the "Program of Studies" for the 2022-2023 school year at the high school level, the principal writes that the school is committed to "providing personalized experiences" using technology and other opportunities based on each learner's academic, social, and emotional development ("Program of Studies," n.d.). He adds that personalized learning helps prepare learners for the future by providing them with voice and choice in their own education which is important due to varying rates of learning and learning styles ("Program of Studies," n.d.).

School Two High School is part of a large, suburban school district in southern Pennsylvania. School Two is a public, co-educational, day school for grades 9–12, and in the

school year 2020–2021 the school had 1,482 students enrolled creating a student-teacher ratio of 17 to 1 (NCES, 2021). School Two has one principal, two assistant principals, and nine faculty in the ELA department. Students in the school are 63.7% white, 25% Hispanic, 5.9% black, 1.4% Asian, and 3.9% two or more races (NCES, 2021). 38.3% of the school qualifies for free and reduced lunch (NCES, 2021). The graduation rate is 91%. (U.S. News and World Report, 2021). Every student in the district is provided with a device to use for educational purposes ("1:World," n.d.). As part of the district mission, the district writes that all students have different learning styles which should be taken into account and that students should be able to demonstrate their unique talents in and outside of the classroom ("Mission, Vision, & Goals," n.d.). The district launched an initiative called "Student-Centered Learning Experience" in the 2018–2019 school year which introduced several aspects of PL such as customizing instruction for individual learner needs and interests, self-directed learning, self-paced learning, and CBAs, which they are now calling Total Experience Learning (Institute for Teaching and Learning, 2018; "Total Experience Learning," n.d.).

School Three Middle School is part of a large, suburban school district in southern

Pennsylvania. School Three is a public, coeducational, day school for grades 7 and 8, and in the school year 2020–2021, the school had 452 students enrolled creating a student-teacher ratio of 15 to 1 (U.S. News, 2023). This school has two assistant principals, one principal shared with the high school, and four ELA teachers. Students in the school are 75% white, 14.8% Hispanic, 3.1% black, 4% Asian, and 2.7% two or more races (U.S. News, 2023). 38% of the school qualifies for free and reduced lunch (U.S. News, 2023). In the district "Strategic Direction" document, the school's district lists one aspect of the future of learning as having personalized learning opportunities and a vision for customizing structures to support each learner in unique

ways ("Strategic Direction," n.d.). In the "Program of Studies" for the 2022-2023 school year at the middle school level, the principal writes, "personalized learning prepares learners for their future by providing them with voice and choice in their education because we understand that everyone learns at different rates and in different styles" ("Program of Studies," n.d.). He adds that he hopes the opportunities for learning options such as self-paced and project-based learning will help addressed the unique academic, social, and emotional needs of learners ("Program of Studies," n.d.).

Participants

Participants provide the voice and descriptions of experiences in phenomenological research, and researchers should study 3–15 individuals (Padilla-Diaz, 2015). Participants in this study were 10 ELA teachers from the three secondary schools. Researchers utilize purposive sampling to ensure that the participants are able to contribute to the researchers' understanding of the central phenomenon in a meaningful way (Creswell & Poth, 2018; Padilla-Diaz, 2015). Purposive sampling was utilized due to the qualitative nature of this study by selecting school districts that were employing PL strategies. The researcher used purposive sampling to focus on the topic of the central phenomenon: interactions within a PL framework for ELA. Participants were selected because of their ability to share their experiences personalizing learning in high school ELA. The participants facing the phenomenon in question provided detail-rich information about the lived experiences of teaching ELA in a PL framework. Participants needed to teach high school ELA in a district that had an established history of supporting a PL framework and attempt to personalize learning themselves. Qualitative researchers must decide how many participants to select to understand their experiences of the central phenomenon (Creswell & Poth, 2018). Some researchers will utilize the theory of saturation to determine

when to stop collecting data or acquiring new participants; saturation has occurred when the researcher collects no new information from the data sources (Corbin & Strauss, 2008). The researcher began by studying the experiences of individuals from each school district (for a total of 10 participants) and then requested participation from additional participants until saturation was achieved. The researcher ventured to ask the existing participants to share enough information through interviews, observations, and document analysis to thoroughly inform an understanding of PL in those three contexts. The researcher observed, interviewed, and collected documents from 10 participants.

Researcher Positionality

Part of my job as a qualitative researcher is to position myself as a pragmatic social constructivist to make sense of the problem in question. Interpretive frameworks and philosophical assumptions inform the problem being studied as well as how that problem is studied (Creswell & Poth, 2018). Researchers must co-create knowledge respectfully, and to ethically endeavor to understand someone else's perspective, one must identify their own mental and ideological frameworks that might affect this process of empathy, learning, and perspective taking. Co-creating knowledge about PL helps other secondary teachers such as myself to personalize learning with meaningful individual activities and peer interactions. This section includes a personal interpretive framework and philosophical assumptions around which this study was framed.

My own past experiences, my perceptions, my beliefs, and my positions thus inherently affected the way the study, data, and results around PL were viewed. Therefore, being reflexive about how personal views affected the research process through a reflexive journal decreased bias. This journal allowed me to write down my personal thoughts, values, interests, and feelings

about aspects of the research process, decisions, and results. True reflexivity pushed me to systematically consider the ways I was constructing knowledge at each stage of the research process. Using epoché or bracketing to approach a topic with fresh eyes helps to improve understanding of the topic (Moustakas, 1994). To do so, I reflected on my efforts to bracket my personal experiences to take a fresh and new perspective from the participants' points of view. If my purpose was to truly understand the experiences of others, I had to put aside my own experiences and reflecting in a reflexive journal helped me to do so consistently.

Interpretive Framework

As a qualitative researcher, I used the interpretive framework of pragmatism as well as social constructivism to inform my research study. A researcher's interpretive framework helps to guide them in the research process such as by focusing on certain topics or aspects of topics, or by facilitating the research process itself such as through the type of research question or data collection methods (Creswell & Poth, 2018). Thus, openly identifying the pragmatist interpretive framework helped me to inform all involved in the study or reading about it to better understand my research process. Pragmatism highlights the results of the research process to solve a problem in the real world (Creswell & Poth, 2018). In using the pragmatist interpretive framework, I was able to central my research around the problem of balancing community and personalization in high school English classrooms, to better focus on the solutions real practitioners use to successfully engage students both individually and as a group. Using a transcendental phenomenological approach, researchers may broaden the opportunities to observe, interview, and collect data regarding this problem based on the pragmatist interpretive framework (Creswell & Poth, 2018). Maintaining a steadfast persistence to identifying successful instructional strategies that other teachers used to challenge and meet the needs of

individual students while also facilitating a healthy group dynamic through a classroom community in high school English classrooms enabled me to facilitate a driven research study. Balancing a drive for real-world solutions is social constructivism and the belief that every person's perspective forms their own reality which could change based on interactions with others (Creswell & Poth, 2018). In order to consider solutions to improving PL, researchers must understand the current and historical context and perspectives of their participants through social constructivism (Creswell & Poth, 2018). Working to understand participant realities and experiences changed my own reality and this process was studied and analyzed to make sense of the phenomenon in question.

Philosophical Assumptions

Other than interpretative framework, researchers also need to position their philosophical assumptions that will inform the study. In this section I discuss my ontological, epistemological, and axiological assumptions which affected my research on this topic. A researcher's philosophy affects the direction of the research goals and the basis for making research-related decisions (Creswell & Poth, 2018). Understanding the philosophy undergirding these decisions helps to inform the research process.

Ontological Assumption

Ontological assumptions focus on views on reality (Creswell & Poth, 2018), and I believe that while there is one objective reality or truth, we all experience or perceive this reality in nuanced ways. Our backgrounds, emotions, states of being, and differing mental processing systems all affect our views of what happens in any given moment. Additionally, our memory may color or otherwise affect our view of what actually happened. Therefore, it is important as a qualitative researcher for me to understand the participants' views on events clearly in relation to

the event itself but also on how they are working to understand that event. These different perspectives may affect themes developed through the findings of the research (Creswell & Poth, 2018). In this study, I sought to understand the balance of personalization and community based on the perspective of teachers in different school districts.

Epistemological Assumption

Epistemological assumptions focus on the importance of understanding the participants and their knowledge accurately by spending time with them in the field (Creswell & Poth, 2018); thus, by taking my knowledge as an English teacher to study the strategies that other English teachers use in the field, I was better able to recognize the context of their understandings through their firsthand experiences. I used my knowledge of ELA to understand the success of the teaching strategies to both personalize a course such as through writing strategies or Lexile reading scores as well as the strategies to foster community such as class discussions. Additionally, focusing on school districts near the school in which I work strengthened my understanding of the context of the community and student body. Finally, spending time observing class strategies and documents in addition to interviewing teachers helped me spend time in the field to see the context of these particular lessons and strategies. Spending the time to see how the participants view the knowledge of their content helped me to make assertions and find themes through research. My background as an English teacher helped me to ask specific questions and understand where the teachers were coming from in our interviews and observations.

Axiological Assumption

Axiological assumptions focus on values and biases that we as researchers inherently bring to the studies we participate in (Creswell & Poth, 2018), and for this study I positioned

myself clearly as an English teacher first with a belief in the importance of both personalization and community in an English classroom. My positionality as a researcher included my status as a white, middle class, female, English teacher which may have affected my perceptions of what students are capable of doing based on their context in the classroom and at home, regardless of teaching strategy. My beliefs in the power of education do not always align with student beliefs, and this disconnect may have affected my view of their efforts as ability instead of motivation. I tempered my axiological assumptions to limit bias by focusing on measurable and observable practices in the classroom, learning artifacts, and the words and intentions of participants in interviews based on their meaning instead of my own. Participants reviewed transcripts to verify that the takeaways from the interactions were valid. Bracketing personal views related to a study helps to maintain credibility (Moustakas, 1994). I bracketed my positionality throughout the process to verify that while I could not eliminate my own personal views, they did not alter the results.

Researcher's Role

A qualitative researcher is a human instrument in a study who works to gather and make sense of data in meaningful ways (Lincoln & Guba, 1985; Yin, 2016). As the human instrument in this study, I used my knowledge of education and research to gather data regarding the experiences of ELA teachers and then perform thematic analysis on the observations, interviews, and documents regarding those experiences. I have been a high school ELA teacher in Pennsylvania for over 10 years, and I wanted to understand more about the decisions and experiences of other ELA teachers who were tasked with personalizing learning in their classrooms. The school district in which I work had been slowly shifting to a PL framework, but I was having trouble basing quality curricular and instructional decisions on research because of

the gap in literature regarding maintaining interaction within high school ELA classrooms while also personalizing learning. I worked to address my own bias about the difficulty of incorporating meaningful interaction in an individualized framework to listen to the experiences of teachers actually personalizing learning with an open mind. I aimed to establish a respectful rapport with my participants to learn about their experiences with this phenomenon to understand the experiences of ELA teachers as they made decisions, employed strategies, and designed processes to personalize learning of their content. As a fellow teacher, I did not have any authority over the participants and instead wanted to understand their experiences as a peer to inform my own instruction and share my findings with others.

Procedures

To conduct this study, the researcher followed the procedures for a qualitative transcendental phenomenological study. Qualitative researchers focus on problems or phenomena in their natural setting that is context-specific, employ multiple methods of data collection, participate in complex reasoning processes and explore the authentic perspectives of participants (Creswell & Poth, 2018). The researcher clearly explained the context and natural setting for the phenomenon at play. In this context, semi-structured interviews were conducted with high school ELA teachers about their experiences, participants facilitating PL learning and meaningful interactions were observed, and documents representing teacher experiences of PL were collected. This section will include setting permissions, securing Institutional Review Board (IRB) approval, soliciting participants, the data collection and analysis plans by data source, and an explanation of how the study achieves triangulation based on the data.

Permissions

The researcher needed to gain institutional review board, superintendent, and participant

approval before moving forward with data collection. The researcher submitted a Liberty University Institutional Review Board (IRB) application for approval to perform this study (see Appendix A for IRB approval). At the research settings themselves, the researcher needed to gain permission from the superintendent first and then the participants of each school. To obtain setting approval, the researcher first gained permission from the superintendents of the proposed school districts to conduct research in the district using a superintendent level permission form (see Appendix B for superintendent letter). If the superintendents gave their permission, they returned the permission response template (Appendix C) to the researcher. Informed consent for gatekeepers means that researchers must inform them about what the study entails such as how data will be collected and used (Creswell & Poth, 2018). The research request clearly laid out how data would be collected, the researcher role on their campuses, how the researcher would work to maintain their confidentiality, and what reciprocity they could expect. The researcher needed to be clear that during observations of classroom strategies, she would not interfere with the learning nor interact with the students themselves. Once the settings approved the study to take place on the premises, the researcher obtained informed consent from the participants, teachers, who agreed to participate in the study at those settings to be observed, interviewed, and submit artifacts or documents for study. Before observations, interviews, and document analysis could begin, the researcher sent a recruitment letter to potential participants to inform them of the purpose of the study and the process in an email (see Appendix D for recruitment letter). To obtain informed consent from the participants themselves, researchers should explain the purpose of the study, their individual risks and benefits, the voluntary nature of the study and their right to withdraw from it at any time, the confidentiality of the participants, and how data will be collected and stored (Creswell & Poth, 2018). The researcher provided a letter of recruitment

(see Appendix D) to inform potential participants about efforts to describe the experiences of secondary ELA teachers in a PL framework and goals to use the data to determine themes about the process, so they were able to provide the researcher with informed consent to participate (see Appendix E). If the participants agreed to participate in this study, they were asked to sign the consent form (see Appendix E for consent form). Approaching participants in respectful ways by asking for informed consent helps build rapport (Creswell & Poth, 2018). Participant interview answers, observation notes, and document analysis were all analyzed through theme identification.

Recruitment Plan

The participants of this study were selected through purposive sampling. Researchers using purposive sampling methods select settings that purposefully inform their understanding of the phenomenon or problem in question (Creswell & Poth, 2018). The purposive sampling strategy the researcher used for selecting participants was typical case purposive sampling. Researchers use typical case purposive sampling to select typical cases to represent the average experiences of those facing the phenomenon or problem (Patton, 2015). The sample pool for this study was high school ELA teachers in Southeastern Pennsylvania who were tasked with implementing a PL framework. The researcher formally collected demographic information from the participants as they consented to participate in this study (see Appendix F for the demographic information survey and Appendix E for the consent form). These participants ranged in experience from 3–30 years. The researcher used pseudonyms to protect the participants' identities. The researcher sent out an email to ask high school ELA teachers who implemented personalization in these settings for their permission to participate in this study (see Appendix D for recruitment letter). After seven days, the researcher sent out one reminder email.

After another seven days, the researcher counted those participants who had not responded as not willing to participate in the study.

Data Collection Plan

Prior to collecting data, the researcher obtained approval from the Liberty University Institutional Review Board (IRB) (see Appendix A for IRB approval). Collecting data from at least three sources helps provide triangulation which increases credibility of themes and findings (Cohen & Crabtree, 2006; Creswell, 2012; Creswell & Poth, 2018; Lincoln & Guba, 1985). In this study, the researcher utilized several data collection tools to focus on understanding the phenomenon of the experience of implementing PL. The researcher conducted semi-structured interviews, observed classrooms as a nonparticipant and took notes, and performed document analysis.

Individual Interviews Data Collection Approach

One method of data collection qualitative researchers may use is semi-structured individual interviews (Rubin & Rubin, 2012). In phenomenological research, the researcher aims to ask enough participants who have experienced the same phenomenon to describe their experiences in order to make certain generalizations to others who have experienced the same phenomenon (Peoples, 2021). Semi-structured individual interviews allow researchers to begin interviews with standardized, open-ended questions, but then add follow up questions to probe more deeply into subjects as needed (Padilla-Diaz, 2015; Peoples, 2021; Rubin & Rubin, 2012). Semi-structured interviews were used to understand the experiences of secondary ELA teachers. Researchers use interviews to experience a social interaction with the participant in order to better understand their experiences (Rubin & Rubin, 2012). Open-ended questions are the norm for qualitative research to allow space for participants to explain their experiences, ideas, and

feelings related to the topics in their own way (Padilla-Diaz, 2015).

The researcher interviewed each participant in the study at least once for at least 30 minutes in the place and forum in which they are comfortable discussing their experiences (such as in their classroom/setting or through video-conferencing technology). I initiated each interview by reviewing the content of the consent form and then the purpose of the study. I asked for permission to record the interview so as to verify the accuracy of my notes and interpretations of their experiences. A semi-structured interview format provides the researcher with the opportunity to co-construct knowledge with the participants using previously created questions as well as the ability to ask follow-up questions that arise in the moment (Kvale & Brinkmann, 2015). I attempted to co-construct knowledge about the experiences of personalizing learning with the participants through these interviews. I asked follow up questions to hear more about any topics that I did not have a strong understanding about in order to clear up any disambiguation. Researchers should take care to ensure the comfort of the participants by deferring to their preferred place and time of meeting and asking ice breaker questions before asking about the research topic (Kvale & Brinkmann, 2015). I ensured the comfort of the participants by meeting with them when and how they wished to meet with me, and by asking about their year overall before asking about their experiences with PL. One example of an introductory question is a grand tour question, which researchers use to invite participants to broadly discuss their experience with the phenomenon or problem (Marshall & Rossman, 2012). Grand tour questions may help improve participant comfort level and expand the depth of subsequent answers (Marshall & Rossman, 2012). I asked an initial grand tour question which invited the participants to bring me on a journey or tour of their experiences with PL, which helped improve their comfort level and expand the depth of subsequent answers; then I asked 15

questions to gather data about their experiences. All questions were peer-reviewed prior to use to ensure validity (Merriam, 2009). I also reflected critically on the questions after the initial interview to ensure that they worked to inform the central purpose of this study as much as possible. Interviews were scheduled, conducted, and transcribed. Transcriptions should be done as soon as possible, preferably within a few hours after the interview to preserve the key ideas and attitudes of the interviewee (Stake, 1995).

Individual Interview Questions

- 1. How has your school year been going this year? Grand Tour Question
- 2. How do you define personalized learning? CRQ
- 3. Describe your process of personalizing learning for your students. CRQ
- 4. What are your experiences of using personalized learning as a framework for education?
 CRO
- 5. How is your role as a teacher different in a personalized learning framework than a traditional framework? CRQ
- 6. Explain the choices you make when personalizing learning for your students. CRQ
- 7. Describe the challenges to personalizing learning you have experienced. SQ3
- Describe the situations when personalized learning went well in your classroom. CRQ,
 SQ1
- 9. Describe the experience of using instructional strategies to personalize learning. SQ1
- 10. How do you gauge the effectiveness of instructional strategies for personalized learning?
 SQ1
- 11. What professional development or other resources help you to personalize learning? SQ1

- 12. Describe the experience of incorporating meaningful interaction to the personalized learning framework in your classroom. SQ2
- 13. How do your interactions with students affect their learning? SQ2
- 14. How do you foster relationships between students in a personalized learning framework?
 SQ2
- 15. What challenges do you face when considering incorporating interactions in your classroom? SQ2, SQ3
- 16. What else would you like to add to our discussion of your experiences with personalized learning that we haven't discussed?

These questions helped me to understand the experiences and processes of ELA teachers as they personalize learning for their students. Questions about the experiences of personalizing learning helped me to understand the thought process that ELA teachers go through when making decisions about personalizing learning for students. Question one was a grand tour to help the participant feel comfortable in a semi-structured interview setting. Questions 2–7 relate to the various aspects of the participants' experiences with PL. Allowing participants to explain their experiences without analytical questions is important to phenomenological study (Peoples, 2021). Teacher experiences with PL shape the behaviors, norms, and expectations of the profession, which in turn may shape teacher preparation programs, professional development, and school planning (Bishop et al., 2020). Questions 8–10 relate to the participants' use of PL instructional strategies in the classroom and their thought process behind them. Herold (2017) saw that teachers at the time did not know how to deliver PL well. Additionally, Schmid et al. (2022) found that the quality of the instruction is crucial to student outcomes in a PL framework; therefore, understanding what types of instructional strategies teachers are currently

implementing helps paint a realistic picture of what PL looks like now. Questions 6 and then 11– 15 relate to the participants' reflections on their process of infusing an individual learning framework with meaningful interactions between students. Unfortunately, educators and policy makers lack the resources to determine how to implement PL well (Bernacki et al., 2021); because of this lack of knowledge, PL has the danger of isolating students (DeMink-Carthew & Olofson, 2020). The isolation of students is problematic for learning and child well-being—the social element is important to learning (Bandura, 1977). For example, strong class community built on social interaction has positive results on student academic success and motivation (Brown & Pederson, 2020). Working to understand the essence of personalizing learning for ELA students provided me with more information for teachers, administrators, and policy makers about what the process of PL is like now, and what could be different about this process in the future. Questions 7 and 15 relate to the participants' focus on the challenging aspects of implementing PL. Shemshack & Spector (2020) argued that research on PL should identify obstacles to PL for educators to facilitate future PL implementation to better meet teacher and learner needs. Also, ELA teachers are sometimes asked to use pedagogy they do not support (Costigan, 2018), so hearing about their own experiences in their own words better informs researchers about the pedagogy of PL. Question 16 asks participants to voice any pertinent thoughts not yet addressed in the interview. These interview questions were reviewed by experts in the field for feedback and revision. The first participant was asked to provide any feedback on the quality or clarity of the questions to make any necessary revisions before subsequent interviews.

Individual Interview Data Analysis Plan

Researchers systematically analyze interview data inductively in order to inform the development of themes to derive meaning from data (Hatch, 2002). Researchers implement thematic analysis to make sense of the data and infer themes; themes (or categories) are collections of similar codes combined to form one important idea derived from the data (Creswell, 2012). Researchers conceptualize themes by engaging in analysis of coded data to construct meaning (Braun & Clarke, 2022). Some researchers choose not to assign codes to discrete segments of data because the mechanics distracts from the concepts (Creswell, 2012). Thematic analysis includes identifying, analyzing, organizing, describing, and reporting themes based on data (Nowell et al., 2017). Peoples (2021) outlines the process of analyzing data as rereading all transcripts and notes to remove unnecessary information in order to create more manageable and meaningful segments of data, then the researcher creates preliminary units of meaning from this collection of data which might reveal a feature of the phenomenon in question. Based on these preliminary meaning units, the researcher inductively reveals the global essence of these experiences to write final meaning units, or themes, which accurately convey truths about the phenomenon of the study (Peoples, 2021). Next, researchers take the final meaning units and deductively situate the narratives of the participants within those meaning units to verify their accuracy; finally, the researcher again inductively synthesizes the participants experiences for each final meaning unit into general narratives of the lived experiences of each facet of the phenomenon (Peoples, 2021). Peoples (2021) then recommends a final step of generally describing the phenomenon by uniting all the themes into a cohesive description of the phenomenon.

To begin analysis, Rubin and Rubin (2012) suggest analyzing data for common ideas or patterns mentioned during interviews as initial codes, also known as Level 1 codes or open

codes, and sometimes known as in vivo codes (Saldaña, 2012). Codes are words or short phrases that provide summative meaning to sections of data (Saldaña, 2012). Researchers use initial codes to synthesize and understand common concepts directly from the data to work towards creating more focused codes based on patterns, known as Level 2 or category codes (Bogdan & Biklen, 2007). Coding data helps move the specific interactions or data to conceptual frameworks and adding analytical memos regarding the meaning of the codes helps refine them (Corbin & Strauss, 2008). Labels help researchers sift through and organize data that addresses the various research questions and identify the frequency of the answers or ideas (Corbin & Strauss, 2008). Assigning codes beginning with initial interviews serves as a foundation for subsequent data collection and analysis (Corbin & Strauss, 2008). This inductive and interpretive method informs researchers clearly about the topics they are studying.

I likewise systematically analyzed interview data inductively in order to inform the development of themes to derive meaning from the data. During the interviews themselves, I focused on my relationship and active listening skills with the participant by using a voice recording application on my laptop or cellular device if necessary to capture the exact words of the participant. In order to collect data from individual interview recordings, the audio recordings were be transcribed using the Otter.ai application. I initially included verbal fillers in the transcriptions for utmost accuracy of participant responses and then worked to focus on the actual meaning of the participants. I then began to implement thematic analysis to make sense of the data and infer themes. As a novice researcher I benefitted from using a framework such as coding to begin analysis of qualitative data. Data was analyzed by compiling notes into categories based on reflections during interviews, disassembling those categories into smaller and more accurate patterns, reassembling all data into more substantive topics, interpreting those

patterns based on data, and then making conclusions about PL. I followed Braun and Clarke's (2022) process of thematic analysis through prolonged engagement with the data to organically write and revise codes to precisely capture the researcher's interpretation of the data. The researcher should likewise organically interpret themes from the codes based on the data, the researcher's subjectivity and understanding of the topic, and training (Braun & Clarke, 2022). I used reflexive thematic analysis to construct meaning from the data based on my understanding of the topics and situations. To begin my analysis, initial codes were assigned starting with the first interview. Analyzing transcripts early also helps to verify the interviews are focused on the research question (Braun & Clarke, 2022). These initial codes help the researcher understand basic concepts to create more focused codes from those patterns. Then codes were assigned in Microsoft Excel on my password-protected computer to help make sense of the data and patterns. This process of memoing helped me to organize the data and identify recurring themes. Labels helped me sift through and organize data that addressed the various research questions and identify the frequency of the answers or ideas. This inductive and interpretive method helped me to better understand the common experiences of ELA teachers as they PL as well as the anomaly experiences of the study.

Observation Data Collection Approach

Qualitative researchers seek to understand the world as it is perceived, and Hegel argued that a psyche may be explored through extrospective observations of behavior (Loewenberg, 1965). I scheduled a classroom observation and then subsequently observed each participant at least once as he or she facilitated an ELA lesson. A non-participant during a lesson attempts to not district or otherwise affect the natural context of teaching, learning, and interactions taking place through direct observation (Creswell & Poth, 2018), so I observed as a non-participant.

Observing the phenomenon through all five senses enhances opportunity to experience what the participant is experiencing (Creswell & Poth, 2018) such as the physical setting or layout, individual activities students participate in, the amount and actions of the students, teacher reactions to events, and the researcher's own personal reactions to these situations (Bogdan & Biklen, 2007). However, observers cannot truly pay attention to everything happening and instead must decide what is most important to devote attention to (DeWalt & DeWalt, 2011). Observations help researchers improve their experiential knowledge (Stake, 1995). As I observed the lessons, I took descriptive notes of my observations related to the facilitation of PL and interactions among learners and teachers, which enhanced my experiential knowledge of the experiences of facilitators of PL. I began each entry with the date, place, and time of the observation. Observers should pay special attention to repeated behaviors (DeWalt & DeWalt, 2011). Even, or in fact especially, repeated behaviors related to interactions within PL were important for me to take note of. Stake (1995) describes the importance of including "incontestable description" in fieldnotes during observations to help mentally revisit the context for analysis later (p. 62). I asked the participants' permission to record the class with my cellular device to verify the accuracy of my field notes and certify any quotes, but if they did not consent to being recorded then I simply relied on my notes themselves. I left space for reflection and analysis in my observation journal to add analytical memos, and then I took part in delayed reflection after the observation so as to be present in the observation itself without missing details. I recorded initial reflections as soon as possible after each observation based on Vygotsky's 1978 SDT as well as on the literature behind PL in the classroom, and then I added a thoughtful reflection based on my current understanding of the developing themes and overall PL experiences of the teachers at each time of the observation (Corbin & Strauss, 2008). I used

an observation protocol (see Appendix H) to focus on descriptions of what the teacher and students were doing at the beginning, middle, and end of class related to individualization as well as socialization. I also added descriptions of the learning context throughout these time frames and any other notable instances related to individualization or socialization of learning. According to SDT from Vygotsky (1978), students learn from and through others such as from using a more knowledgeable other and being placed in the ZPD. My observation notes highlighted where students learned from and through others and what the teachers' experiences of implementation were during those times. Implementation of PL is haphazard without quality research about it (Basham et al., 2016; Strekalova-Hughes et al., 2021), and there is not enough research yet on how to PL well (Schmid et al., 2022; Shemshack & Spector, 2020). In fact, PL is difficult to manage (Gross et al., 2018; Schmid et al., 2022), and teacher roles change considerably in how they facilitate learning as well as the philosophical basis for those roles; teachers transition from being responsible for controlling the class and supplying the facts and content to students, to facilitating student control of the class and creating opportunities for the students to learn the facts and content (Bishop et al., 2020). Observation notes are living documents that can change over time as the observer experiences and reflections on the experiences of the phenomena (Burkholder & Thompson, 2020). I referenced these observation notes to write narrative data about the experiences of the teachers and my own experiences as observer, and thus are living documents that evolved as my understanding of the phenomenon and settings changed over time. My observation protocol is listed in Appendix H.

Observations Data Analysis Plan

Researchers use observational protocols to separate the descriptive notes of the participants and phenomenon being observed with the reflective notes of their own reactions and

thoughts about those situations into a table to better organize the data (Creswell & Poth, 2018). Depending on the array of data, researchers use schematic diagrams at times to make sense of the disparate patterns and concepts which all relate to the central phenomenon or problem (Verdinelli & Scagnoli, 2013). Researchers may add analytic memos to notes as time permits during observations or directly after them to help preserve ideas that the specific details of the observations alight (Rogers, 2018). For example, identifying the level of concepts helps clarify the relationships and definitions of the various levels of concepts (Corbin & Strauss, 2008). Similar to interview data analysis, researchers first conduct an initial coding of the observation notes based on their research questions. After the initial coding, researchers then organize the data and identify recurring themes and ideas to make sense of the data (Creswell, 2012).

Reflections on the recurring themes or concepts between interviews and observations work towards providing triangulation and reliability of the data and themes (Campbell et al., 2020).

Lean coding in the initial analysis of the data helps researchers begin to make sense of the levels of concepts and overarching themes based on the observations (Creswell, 2012).

During observations, I used an observational protocol to separate the descriptive notes of the observed participants' experiences personalizing learning with the reflective notes of my own reactions and thoughts about those situations (see Appendix H). I added analytic memos to my notes as time permits during observations or directly after them to help preserve ideas gleaned from the observation and other sources of data collection. For example, identifying the level of concepts helps clarify the relationships and definitions of the various levels of concepts. Based on the array of data from the observations, I used a schematic diagram to make sense of the disparate patterns and concepts in relation to PL. Similar to interview data analysis, I used Braun and Clarke's (2022) method of reflexive thematic analysis. I first conducted an initial coding of

the observation notes based on my research questions. Lean coding in the initial analysis of the data will help me begin to make sense of the levels of concepts and overarching themes based on the observations. Because researchers use thematic analysis to develop themes of meaning from all sources of data, analyzing observation data with the interview data in mind will result in more thoughtful themes (Braun & Clarke, 2022). After the initial coding, Microsoft Excel was used on a password protected computer to organize the data and identify recurring themes and ideas to make sense of the collected observation data. Special attention was paid to specific situations, examples, or ideas brought up in interviews and then I reflected on the actual lived experiences of participants in the observations to inform my understanding of the facilitation of PL. The initial codes were organized into more robust, or level two, codes and then used to make sense of recurring patterns of data into themes.

Document Analysis Data Collection Approach

The final method of data collection used to inform my understanding of this transcendental phenomenological study was document analysis. I focused on the educational documents the teachers create and use in their classrooms to facilitate PL. Documents may provide data about records of activities that interviewees may recall specifically, or the observer may not see directly (Stake, 1995). All concepts of analysis must arise from data, and documents could fill a gap in the data that observation and interviews may leave (Corbin & Strauss, 2008). Documents such as lesson plans, syllabi, curricula, and instructional organizational systems were collected, catalogued, and analyzed as they became available (see Appendix I for document analysis protocol). Each participant submitted two documents, which helped create a database of 20-30 documents to analyze for the design elements teachers utilize to personalize a task and measure and organize mastery of skills and content. Researchers should provide teachers with

more information on how design elements personalize a task (Bernacki et al., 2021), which means that researchers should see the design elements teachers are using to do so now. When students perform different tasks at different times, teachers may have difficulty managing the learning process of PL (Schmid et al., 2022), so seeing the lesson plans, syllabi, and curricula which provide an outline or plan of how to facilitate the disparate learning processes for students to master content and skills in their own ways and at their own paces will help to understand what may be difficult about the process to better describe the essence of PL in ELA. Select lesson plans, syllabi, curricula, and instructional organizational systems provided primary knowledge about what resources and activities teachers spend their time creating and providing to students to motivate and document PL. Lesson plans and syllabi demonstrated the real-world decisions participants made to personalize learning for students. Curricula also helped inform the context within which the participant must work to frame PL. Instructional organizational systems such as a learning management system further explain the experiences of personalizing learning by demonstrating the context in which participants use or create data to make decisions about individual or groups of learners. A hallmark of PL is data-informed instruction (Halverson et al., 2015; National Forum on Educational Statistics, 2019; Pane et al., 2017), so seeing the logistics of how teachers record and make sense of data on paper and then use that information to make decisions within the classroom clarifies more about their experiences of personalizing ELA. Additionally, lesson plans along with the directions or procedures they contain provided data regarding what strategies the teachers used to facilitate learning and how they went about planning or creating those learning experiences for students. No common operationalization of PL exists currently (Schmid et al., 2022; Shemshack & Spector, 2020; Zhang, Yang, & Carter, 2020), so working to understand how real ELA teachers operationalize PL within their secondary content area will clarify theoretical PL from actual PL.

Lesson plans and curricula provided data regarding the proactive planning of meaningful interaction among students or between students and teachers. While many critics accuse practitioners of PL of isolating students (Alamri, 2020; DeMink-Carthew & Olofson, 2020; Dishon, 2017), the National Forum on Educational Statistics (2019) argues that PL does not equate to learning in isolation. Understanding how teachers planned to incorporate meaningful social-emotional learning through peer or group interactions was vital to expressing the experience of personalizing learning for ELA. Finally, any documents that highlight challenges to PL such as curricula clarified any issues participants discuss in their interviews or demonstrate in the observations. Practitioners of PL often must implement the framework without much guidance (Bernacki et al., 2021), so I wanted to see the amount of guidance embedded in curricular documents to aid teachers through challenges of PL. Some documents such as curricula and syllabi were publicly available online, and other documents such as representative lesson plans, and instructional data management systems were provided by the participants. Participants eliminated student names and identifiers from any applicable documents prior to submission for research.

Document Analysis Data Analysis Plan

Gathering and analyzing data from documents is similar to observations and interviews; researchers should begin with a plan but be open to the unexpected (Stake, 1995). I used a robust organizational system in Microsoft Excel on my password protected computer to file and record the documents themselves and important features in relation to the research questions which will help me to perform a schematic diagram (Verdinelli & Scagnoli, 2013), or hierarchical array (Creswell, 2012), based on what data discovered through the document analysis. Documents

were organized and labeled by type, origin, descriptive notes related to the research questions, and reflective notes about the documents in light of research understanding of the phenomenon and other data collection methods (see Appendix I for document analysis protocol). I then analyzed these notes based on their relation to the research questions. Specifically, I went through writing preliminary meaning units of the documents for initial themes and ideas and then synthesize those into final meaning units or themes (Peoples, 2021). These themes were compared to the findings from the other two methods of data collection. I likewise used Braun and Clarke's (2022) method of reflexive thematic analysis to organically build and revise codes based on my understanding of the document data and then construct meaning from that data into complex themes.

Data Synthesis

Synthesizing the findings and data from at least three data collection methods to determine overall recurring themes helps verify the findings for the individual data collection methods and reinforces the accuracy of the final themes themselves (Creswell, 2012). Synthesizing interviews, observations, and document analysis for teacher experiences when personalizing learning by layering themes to build major- and subthemes into more sophisticated themes to broaden the understanding of the important concepts. I read all materials from beginning to end with a new perspective after participating in coding and data analysis of the individual data collection methods. The themes from each data collection method (interviews, observations, and document analysis) were reviewed independently and then in comparison to the other methods for validity such as through axial coding (Corbin & Strauss, 2008). Overall recurring themes were analyzed for support and nuance from each data collection methods.

data and results in the study and validate the thematic analysis through triangulation (Creswell & Poth, 2018). For example, as participants discussed topics in their interviews, I verified those topics through the documents they provide to me and pay close attention to those topics in observations. Observation without interview data may lead researchers to attribute meaning to situations that is not genuine; instead, good researchers synthesize information from both sources to make sense of the other (Corbin & Strauss, 2008). The observations allowed me to see how the ideas and issues raised in the interview played out in an actual lesson; additionally, observations clarified how the participants used the documents themselves or how the documents affect behavior or experiences in the classroom. Finally, the issues and ideas apparent through interviews and observations were closely examined in the documents to see the role that district initiatives or other outside factors have on personalizing learning. Likewise, differences or discrepancies between how participants talk about their experiences and how those experiences are planned or on paper or play out in real life were examined and analyzed. Reviewing the data and codes from the perspective of the other data collection methods helps to review the proposed themes to verify their credibility and trustworthiness (Nowell et al., 2017).

Trustworthiness

Rigorous qualitative research should be trustworthy so that readers have confidence in the researcher, the process, and the results of the study (Lincoln & Guba, 1985). If researchers do not demonstrate trustworthiness, their individual study and in fact all their research in general could questioned, criticized, or disproven. It is better to instill trustworthiness into the data collection process, then to attempt to prove the truthfulness of the data itself after the fact (Lincoln & Guba, 1985). In particular, readers must be able to trust the researcher, process, data, and findings

(Corbin & Strauss, 2008). This section includes the credibility, transferability, dependability, and confirmability of the data and the results through a qualitative lens.

Credibility

Qualitative research aims to reflect the nuanced reality of participant experiences and phenomena, and thus must accurately reflect that reality based on the experiences of the participants themselves, known as credibility (Creswell & Poth, 2018; Lincoln & Guba, 1985). The researcher him or herself is the first instrument to ensure credibility and must take the process seriously (Nowell et al., 2017). In order to demonstrate confidence in the truth of research findings through credibility, researchers utilize methods such as (a) triangulation, (b) peer debriefing, and (c) negative case analysis (Cohen & Crabtree, 2006; Lincoln & Guba, 1985). I used (a) triangulation, (b) peer debriefing, and (c) negative case analysis to improve my credibility.

Triangulation

Triangulation allows researchers to corroborate evidence from various sources to validate themes and findings (Cohen & Crabtree, 2006; Creswell, 2012; Creswell & Poth, 2018; Lincoln & Guba, 1985). This process of triangulation helps researchers understand the phenomenon in question clearly and thus be able to report findings that are more accurate and credible (Creswell, 2012; Stake, 1995). In this study, I commenced triangulation through corroborating evidence from multiple participants at multiple settings, data collection methods, and the data itself. I analyzed each collection of data individually for themes through coding, and then synthesized those themes for all methods of data collection. I compared the findings from semi-structured interviews of ELA teachers, classroom observations, and document analysis for educational documents. Additionally, the multi-setting nature of this study allowed for triangulation between

settings, contexts, experiences, and participants. This process of triangulation helped me understand the experiences of personalizing learning clearly and thus be able to report findings that are more credible to instructors, administrators, and policy makers.

Peer Debriefing

Peer debriefing tasks a nonparticipant, an individual completely unconnected to the research but knowledgeable about the topic and research process, with critiquing the process to help the researcher improve the study (Cohen & Crabtree, 2006; Lincoln & Guba, 1985). I have asked Margo Sinclair, a recent graduate from the University of Delaware who earned an Educational Doctorate, to review my proposal of my process including the theoretical framework, methods, and eventually the findings to provide constructive criticism and uncover any potential biases, perspectives, or assumptions inherent in the study that I was unable to notice myself. Debriefing helps to determine the logic of themes the original researcher identified and analyzed from the available data (Lincoln & Guba, 1985). Taking notes about the debriefing helps researchers to improve their studies (Creswell & Poth, 2018; Lincoln & Guba, 1985). I participated in member debriefing twice through the study and maintain notes for each session. First, when I had a finished draft of the proposal for feedback about the purpose, data collection methods, and other initial considerations, and again when I had a finished draft of my findings for feedback on thematic analysis. I edited the study based on feedback from Sinclair.

Negative Case Analysis

In the course of analyzing data and determining themes, some cases may arise which do not fit the current hypothesis or proposed theme (Creswell & Poth, 2018). The process of changing the themes and hypotheses to fit the unusual or new cases is known as negative case analysis (Lincoln & Guba, 1985). Once all deviant cases, examples or situations fit within the

study's ultimate interpretations, confidence in the credibility of the assertions improves (Lincoln & Guba, 1985). Researchers should pay close attention to the data in interviews, observations, and document analysis that do not fit within current iterations of themes and findings or are just very different from the other examples (Cohen & Crabtree, 2006). This process informs the research itself (Corbin & Strauss, 2008). I focused on aspects of interviews, observations, and document analysis that did not support assertions from the other two methods or the themes overall. I then reworked my understanding of the results to provide a more accurate hypothesis of the themes based on those situations. Even though I did not find ample negative cases, the process of looking for them informed my research on teacher experiences.

Transferability

While most qualitative studies perform a deep and rich description of specific situations, experiences, or phenomena, the results of these studies may be transferable to other contexts such as time, situations, or people if they are similar enough to the study in question (Lincoln & Guba, 1985). Researchers improve transferability by providing thick description of the participants, settings, and setting or context, and more to allow readers to be informed enough to make judgement calls about transferability themselves (Creswell & Poth, 2018; Holloway, 1997; Lincoln & Guba, 1985). With a focus on the experiences of secondary ELA teachers incorporating meaningful interactions in PL frameworks, the experiences of other teachers in other levels, content areas, or frameworks of teaching may not have as much transferability. However, other secondary ELA teachers seeking to incorporate personalized experiences for their students may gain insight into their own processes by reading the stories of others.

Dependability

Another important element of trustworthiness for a study is its ability to be replicated based on the descriptions of the setting, data collection methods, and so forth and get similar results (Lincoln & Guba, 1985; Nowell et al., 2017). Clear descriptions of the procedures should allow others to repeat the study. This study could be replicated by others based on the description of my methods which are supported by literature regarding PL, phenomenological study analysis, and social learning theory. I used an inquiry audit to demonstrate the dependability of this study through a thorough review by my dissertation committee and the Qualitative Research Director of Liberty University.

Confirmability

The findings and results of a study should be based on the data from participants themselves, and not the biases nor assumptions of the researcher (Lincoln & Guba, 1985). All findings should be grounded in the data and be able to be traced back to the data as such (Lincoln & Guba, 1985). I used several techniques to ensure the confirmability of this study including triangulation, audit trails, and reflexivity. My efforts to ensure confirmability through triangulation are outlined above; I triangulated data through multiple collection methods, analysis strategies, and through various participants and settings. Researchers create audit trails to highlight their process of following procedures, collecting data, analyzing data, and determining themes so that others are able to follow their work logically (Cohen & Crabtree, 2006). Readers are able to follow the train of thought from an assertion to the data which informed that assertion based on clear rationale (Lincoln & Guba, 1985; Nowell et al., 2017). As I worked through my research process, I created an audit trail through my process of outlining my procedures and process notes, collecting data, analyzing data, and creating a final report of findings which could be logically followed and tracked. A reader should be able to follow the

evolution of my findings from initial data collection to eventual robust theme through this trail. My use of theoretical framework and concrete data will help clarify the thought-process for decisions. Finally, researchers also use reflexivity to improve the confirmability of their studies (Creswell & Miller, 2000). As human instruments, researchers' personal beliefs and positions will inherently affect the perspective through which they conduct research (Lincoln & Guba, 1985; Nowell et al., 2017). Researchers may reflect on their personal opinions throughout a study in a reflexive journal (Lincoln & Guba, 1985). Researchers write down personal reflections such as values and interests about aspects of the research process in reflexive journals to critically consider how they are constructing knowledge (Cohen & Crabtree, 2006). Reflexive journals work well with reflections on bracketing to eliminate personal bias or experiences for qualitative research (Moustakas, 1994).

Ethical Considerations

Ethical considerations that need to take place during qualitative research are related to respecting persons, welfare, and justice at research settings and for the participants at those settings, including all data representing the settings and participants (Creswell & Poth, 2018). Researchers must demonstrate research integrity throughout the process to conduct truthful research (Shaw & Satalkar, 2018). I made each research decision carefully so as to treat the three settings and 10 participants within those districts with respect, welfare, and justice. As I conducted a transcendental phenomenological study to understand how teachers in southeastern Pennsylvania work to implement PL in secondary English classrooms, I collected data via observations of classroom lessons, interviews with English teachers, and collection of documents from the lessons with integrity. These settings have all made a concerted effort through professional development and district initiatives to improve upon their ability to personalize

learning, so they will benefit from a reflection on their own and other similar school districts' strategies to personalize learning in their English classrooms. These ethical considerations will take place throughout the research process. Getting IRB approval first ensures ethical considerations prior to contacting potential participants (Shaw & Satalkar, 2018). First, I earned approval for my qualitative study from an IRB (see Appendix A for IRB approval) before even attempting to contact any potential participants to verify that my plan included appropriate ethical considerations for all involved. Once I had approval from the IRB, I obtained setting approval for the gate keepers and participants I used in my study based on purposive sampling for typical schools implementing PL. I used pseudonyms for both the settings and the participants to protect confidentiality and anonymity, and I ensured the study benefits the participants and settings by focusing on realistic PL strategies in the context of the county which these districts have made a concerted effort to improve upon. Because hosting researchers as guests places a burden on participants (Stake, 1995), I also provided gift cards to participants in exchange for their time and attention during the study. Once the settings and participants were on board to participate in the study, I continued building respectful relationships with all involved such as by interviewing participants how and when they were comfortable to do so. For example, if they were more comfortable interviewing in person after school or over video conferencing during their lunch break, I endeavored to make that happen. I observed classroom lessons as a nonparticipant to see what a lesson would be like without an observer in the room. Finally, researchers must ensure the data they collect is honest and not falsified or misleading in any way (Creswell, 2012). I reported my findings truthfully, even if the findings went against what I anticipated for the study.

In terms of data analysis, I continued maintaining ethical considerations. For example, I will store my data securely for three years by saving the information in a password protected environment on the hard drive of my computer with a backup flash drive locked in my desk drawer along with any paper notes I may have from observations. After three years, I will destroy all data. When analyzing data, researchers need to avoid bias by including analysis of data that supports and detracts from the development of themes (Lincoln & Guba, 1985); in this situation, I included both positive and negative results of balancing personalization and community such as instances where there is no community or no personalization. I also sought out second opinions throughout the process to verify my coding, themes, and general analysis such as through peer debriefing. I bracketed my personal views about the importance of balancing personalization and community during observations and interviews by first working to understand what is happening in the classrooms and the point of view of these expert teachers. Finally, I ensured that I always cite my sources to avoid plagiarism. Because I studied a school environment, I was especially careful to respect the persons, welfare, and justice of all involved, including students, teachers, staff, and more. I had a thorough plan of data collection and analysis and maintained a high degree of ethical consideration throughout the process by curating a respectful and open line of communication with the settings and participants. Even using nonbiased language is important to respecting participants of research (Creswell, 2012). I endeavored to be purposeful and careful with all of my interactions in this process to respect the schools and participants involved.

Summary

The purpose of this transcendental phenomenological study was to understand the lived experiences of secondary English language arts teachers implementing PL in Southeastern

Pennsylvania. Chapter Three included information regarding the methods of this qualitative research study. Verifying methodological congruence tasks researchers with aligning the problem, purpose, research questions, and other essential elements of the research design to one another (Creswell & Poth, 2018). Through this transcendental phenomenological study, the researcher explored the realities of personalizing learning at the secondary level and the decisions and circumstances teachers face to provide both community and individualized support. Multiple participants helped inform my understanding of the PL experiences of secondary ELA teachers in different, but similar contexts. The researcher used semi-structured interviews, classroom observations, and document analysis to provide data to understand the experience of personalizing learning. Recordings of the interviews were transcribed and codes were assigned to recurring ideas to identify themes. Once codes were assigned for recurring patterns to demonstrate themes in each individual data set, the codes and themes from all three data sets were synthesized to improve triangulation. Focusing on the words, experiences, and work of the teachers themselves—while bracketing personal experiences and assumptions helped to illustrate the rich experiences of these participants.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this transcendental phenomenological study was to understand the lived experiences of secondary English language arts teachers implementing personalized learning in Southeastern Pennsylvania. It was important to thoroughly build meaning around the experiences of personalizing learning by paying close attention to the words and real-life experiences, on paper and in person, of the teachers endeavoring to facilitate this educational framework. Using a transcendental phenomenological approach helps researchers to focus on the data from the minds and lives of the participants themselves free from researcher bias (Van Manen, 1990). This chapter begins by describing the participants based on the gender, years of teaching experience, current teaching responsibilities, and highest educational degree. The participants were involved in interviews, classroom observations, and submitting documents demonstrating experiences of personalizing learning. The next section in this chapter provides results of the findings based on the interviews, observations, and documents through key findings. From these results and data analysis and synthesis, the researcher was able to develop themes about experiences

Participants

The participants for this study were selected using purposive criterion sampling. This technique allows the researcher to select participants who can best inform an understanding of the phenomenon under scrutiny (Creswell, 2013). Each participant was selected from a secondary school with a mission statement or similar school wide policy towards personalized learning within the geographic area of Southeastern Pennsylvania. Each participant was currently

teaching secondary ELA with a minimum of three years of experience. Pseudonyms for the settings and participants were used for confidentiality.

Table 1: Teacher Participants

Teacher Participant	Years Taught	Highest Degree Earned	Courses Taught	Grade Level
T. Vaughan	16	Masters	English 10, American Literature	10th-12th
O. Kennedy	30	Masters	English 9, 10, American Literature, AP Literature	9th-12th
K. Serrano	3	Bachelors	English 9, American Literature, Creative Writing	9th–12th
R. Peters	6	Masters	English 10, Advanced Composition and Speech	10th-12th
H. Pittman	20	Masters	English 10, Journalism	10th-12th
W. Johns	23	Masters	Creative Writing, British Literature	10th-12th
C. Brown	3	Bachelors	English 10, Journalism	10th-12th
M. Cono	11	Masters	English 7, 8	7th–8th
V. Walls	8	Masters	English 7, 8	7th-8th
E. Cruz	20	Masters	English 7-12 Online	7th–12th

Tommy Vaughan

Vaughan is a male ELA teacher from School One with 16 years of experience and a master's degree in education. During the course of this study, he taught English 10 and American Literature with students ranging from 10th to 12th grade. Administrators in Vaughan's district started discussing initiatives related to PL in 2018. About PL, Vaughan stated, "I think the point of personalizing is to have a range of tools to meet a range of students wherever they are." In his teaching, he uses various methods to get to know students based on their interests and backgrounds as well as their abilities to cater classroom activities for the entire class, small groups, or individual students at a time while bringing every up to the standards of the curriculum through choices of topics, projects, groups, and resources. He stated:

There are a number of avenues for personalizing learning in my classroom. Some depend more on student choice, some depend on formal arrangements like IEPs, and some depend on my own observations and actions. Students can personalize assignments that offer them choices in the products they create or processes they use. However, when students exhibit a particular interest or need, I will often speak to them individually to encourage them to pursue a certain approach to an assignment or to offer extra support.

Vaughan values personal relationships with students to inform his teaching strategies and ability to challenge students where they are emotionally and academically, and the ability to help students feel comfortable in the classroom environment to share. He noted that PL takes much more time and multitasking and is more difficult in larger classes.

Olive Kennedy

Kennedy is a female ELA teacher from School One with 30 years of experience, two master's degrees, and four additional teaching certifications. During the course of this study, she

taught English 10 and American Literature with students ranging from 10th to 12th grade. Administrators in Kennedy's district started discussing initiatives related to PL in 2018. About PL, Kennedy stated, "While total personalization is never possible, there are plenty of opportunities in ELA classes." Kennedy discussed the need to survey the students at the beginning of the semester to gather data on their interests, strengths and weaknesses related to ELA, and their opinions on their own barriers to success; and then to gather academic information related to IEP or 504 plans. Based on this information, she designs choices for students about topics to explore, methods of presentations, writing rubric components and more, which all meet the same standards. Kennedy added that, "students respond favorably to personalized scaffolding, which then allows them a better chance to grasp the concepts we are learning" but that teachers must know the students well and take the time to personalize learning which is difficult in large classes. She adds that personalizing learning is difficult with any targeted professional development about how to use it in the classroom and students can get off task easily when they are working on different tasks or topics related to their interests outside of school. However, Kennedy adds that "personalization does not necessarily mean working alone all the time" and that partner or group work, where choice or differentiation is present, also constitutes PL.

Kyla Serrano

Serrano is a female ELA teacher from School One with 3 years of experience and a bachelor's degree in education. During the course of this study, she taught English 9, American Literature, and Creative Writing with students ranging from 9th to 12th grade. About PL, Serrano stated, "I try to personalize learning for students by offering choices of activities for assessments, literature, order of completing tasks, and extra credit. I offer these when needed to keep

engagement higher while still covering key content." Serrano added that she starts by spending the time to get to know students based on their learning styles, personalities, and strengths and then she also uses technology tools for PL and provides personalized feedback to maintain a positive rapport with students. She said that when done well, PL improves engagement and self-efficacy for students, but that it takes more time and is more challenging with large class sizes.

Rosalee Peters

Peters is a female ELA teacher from School One with 6 years of experience and a master's degree in education. During the course of this study, she taught English 10 and Advanced Composition and Speech with students ranging from 10th to 12th grade. Administrators in Peters' district started discussing initiatives related to PL in 2018. About PL, Peters stated that maintaining relationships by getting to know the students first is her top priority. When she knows the students and has a relationship with them, she can provide personalized instruction and choices for accessing, practicing, or demonstrating their learning in the curriculum. She stated:

I definitely see a correlation between the relationships I have with students and their willingness to engage. Taking the time to learn about them and their interests shows them that I am not just trying to get them to learn because it is my job, but that I want them to learn because I care. I have many students tell me that they do not like English, but I see over the course of a semester a change in attitude because I try to make my class about them [the students] and not about the assignments.

However, Peters added that in a state-tested course, there is not much room to personalize because the curriculum is strict, and the teacher must cover so much content that they can't always dig deeply into it. She has done hands on learning through PBL which improves

engagement, but it is difficult to bring that depth of learning and time investment to every unit, especially when hands on activities means giving up control of the classroom to the students. She has found guidance in master's coursework in customized learning and books such as *Balance* with Blended Learning by Catlin Tucker (2020) and What Schools Could Be by Ted Dintersmith (2019).

Heidi Pittman

Pittman is a female ELA teacher from School One with 20 years of experience and a master's degree in education as well as one in English. During the course of this study, she taught English 10 and Journalism with students ranging from 10th to 12th grade. Administrators in Pittman's district started discussing initiatives related to PL in 2018. About PL, Pittman stated she uses surveys about student interests, preferences, learning styles, reading levels, cultural diversity, special needs and accommodations such as IEP's and GIEP's as well as a realistic knowledge of the resources and constraints of the classroom and semester to best serve the students in her room at any given time to achieve the course objectives. She spends much of her effort on building relationships and trust with her students because, "It's so important to be a source of support for students' overall well-being, not just their academics. We need to constantly demonstrate care and concern for them, and make sure we're addressing and meeting their social and emotional needs." She added that, "There is no doubt in my mind that interactions are the most important, most meaningful part of learning!" Pittman focuses on student check-ins and discussions with students to personalize with literature to build their ownership with the material and build their self-efficacy. She added that doing more to personalize takes considerable effort to survey, track, assess, cater activities, and change the way things have been done in the past which may not be feasible given the resources and time

constraints. Additionally, she noted that students struggle with self-regulation and teachers must balance providing autonomy and guidance in appropriate amounts for each student at any given time.

Westin Johns

Johns is a male ELA teacher from School One with 23 years of experience and a master's degree in education. During the course of this study, he taught Creative Writing and British Literature with students ranging from 10th to 12th grade. Administrators in Johns' district started discussing initiatives related to PL in 2018. About PL, Johns stated, "personalized learning is never really 'done.' Some classes are more responsive than others and some groups demand more rigid approaches. Personalization is an ongoing evaluative process that demands pragmatism." He added that he approaches PL mostly through providing students with choices such as for projects, topics to write about or explore, the form of their work, how to present their ideas, what groups to work in, what resources would benefit them while working, and much more. He indicated that students need teachers to provide them with personalized, supportive, positive feedback and also to model vulnerability and respect in the classroom. He said that he uses flexible approaches to teaching based on student engagement and understanding, and values authentic learning opportunities and frequent student check ins.

Charlotte Brown

Brown is a female ELA teacher from School Two with 3 years of experience and a bachelor's degree in education. During the course of this study, she taught English 10 and Journalism with students ranging from 10th to 12th grade. Brown was discouraged with the traditional model of instruction when students were not engaged in the coursework, and she struggled to defend why she was asking them to take quizzes or fill out worksheets based solely

on impersonal standards. Since using a more personalized approach, Brown explained that she feels more connected to her students, the students appear more engaged with their learning and regularly share positive feedback with her about her class, and she is providing them with more authentic and rigorous learning experiences. She said, "I personally feel like English is easier to personalize learning" because she can provide personalized feedback for growing as writers, researchers, and critical thinkers. She also provides more choices for students about topics, projects, novels, writing and speaking opportunities, and can cater the class to their interests and abilities. Brown appreciates that while personalizing learning, her relationships with students "are 10 times better ... I think I actually get to know my students more and I have more time to work with them when I'm personalizing the material for them." The students work in more authentic ways about topics that they care about in ways they feel confident and comfortable working. She uses hands on, PBL strategies to challenge students to think critically which all takes more time and can cause initial push back from students who are more used to just reading a textbook and taking a quiz. The students routinely work through ideas with thinking partners and in independent journals which she painstakingly reads and responds to for personalized feedback and formative assessments. Her coursework in the Total Experience Learning program through Albright College has helped her think more creatively about how to challenge students and help them achieve objectives in more meaningful ways ("Total Experience Learning," n.d.). In particular, she highlighted her use of the Top 10 skills of 2025 chart from the World Economic Forum as crucial to her ability to personalize learning and provide authentic learning opportunities to engage students (Whiting, 2020).

Mary Cono

Cono is a female ELA teacher from School Three with 11 years of experience and a master's degree in education. During the course of this study, she taught English 7 and 8 with students ranging from 7th to 8th grade. About PL, Cono said, "I consider what options allow students to master the material and demonstrate their learning in unique ways without sacrificing the standards. I get to know them and consider what would be engaging to lead them through the learning process in authentic ways to them." She added that she spends considerable time at the beginning of the year gathering information on the students about their interests, learning styles, family lives, backgrounds, hobbies, work preferences, IEP and accommodation information, and much more. Then, she uses that information to cater the classroom environment and strategies to best serve the students in her care. One way she does this is by offering choices for how to complete assignments, how to access resources, how to present information, and much more such as through playlists, choice boards, and tic tac toe sheets. She also provides personalized feedback in class and on their assignments and writing to better help them learn and improve towards meeting standards. She said that PL is challenging because of the time commitment, especially with large classes, and that multitasking to meet the needs of so many students working on different topics or projects at the same time is mentally taxing. Cono added that building a positive relationship with students early on helps because she can "create assignments and situations where students are able to have choice and bring their own interests to the classroom, but they must also feel comfortable making choices and expressing their unique selves in the classroom for that to work." She explained that if they do not open up about their interests or ideas, it is difficult to personalize the content or meet them where they are.

Valerie Walls

Walls is a female ELA teacher from School Three with 8 years of experience and a master's degree in education. During the course of this study, she taught English 7 and 8 with students ranging from 7th to 8th grade. About PL, Walls said she mostly differentiates assignments based on student ability, interest, or IEPs. She caters the choices, directions, texts, and timing based on student engagement and ability for the tasks at hand. She pays attention to where they are successful and focuses on those skills or situations along with a positive rapport with the students to push them. She has struggled with students manipulating the choices provided to do what they perceive to be the easiest option or to just act immaturely with peers, which at the middle school level she said was normal no matter what strategies teachers use. She tries to use high interest texts and examples to engage all students in topics they care about.

Elizabeth Cruz

Cruz is a female ELA teacher from School Three with 20 years of experience and a master's degree in education. During the course of this study, she taught various English courses in online environments for students in grades 7th to 12th but was primarily tasked with teaching middle school students. Cruz found personalizing learning in some ways easier in exclusively online courses, but in many ways more challenging than a brick-and-mortar course. About PL, Cruz said, "I don't do it blanket overall, I sort of to do it per child by looking at IEPs and what their SDIs are, communicating with parents, and providing accommodations as needed for each student in each situation." The online courses provide students with inherent PL strategies such as flexible pacing, multiple options for accessing the coursework and using resources, additional resources, and some choices for responding to course content. Cruz additionally surveys students and parents and offers group or individual check ins in person or through Google meets each

week. She found that many students benefit from this environment and as they begin to be successful, try harder and eventually pass and even go on to college when they had not previously thought it possible. When she can work one on one with students to praise and encourage them and provide them with personalized feedback and accommodations, they benefit from that time investment and positive relationship. However, some students and parents do not check emails or respond to communications about their lives or the course itself and then struggle when they fall behind. Additionally, she explained that some students electing to work online from home may have some form of social anxiety and thus do not want interaction with the teacher let alone their classmates. Without any communication, Cruz says she is unable to adequately personalize learning nor build positive relationships with those students.

Results

This study was designed to understand the complex lived experiences of secondary ELA teachers endeavoring to personalize learning in their classrooms using interviews, observations, and document analysis. Thorough researchers synthesize information from all available sources to make sense of the data in context (Corbin & Strauss, 2008). After producing codes from the three sets of data from the three schools individually, the codes were synthesized together into four themes about personalizing learning: student engagement, time and resources, positive relationships, and multitasking and balancing. These themes help illustrate the lived experiences of secondary ELA teachers personalizing learning. See Appendix J for the complete thematic table of themes, sub-themes, codes, and data collection methods used to generate the data to inform those codes and subsequent themes.

Table 2: Codes for Student Engagement

Theme	Sub-Theme	Codes
Student Engagement	Choices	Engagement, choices, tech tools, guide choice,
		alignment of choices

I.	Authenticity	Authenticity, engagement, PBL, hands on
	Self-Efficacy	Self-efficacy, positive feedback, confidence, student
		success

Student Engagement

The first theme that arose from the three data sets was student engagement in the classroom, primarily from the use of providing voice and choice to students. Choices, authentic learning environments, and situations to improve self-efficacy were evident through the interviews, observations, and document analysis. Overall, the participants explained that when they use PL, student engagement increases from the choices offered, the authentic learning environments, and the ability to build self-efficacy.

Choice

100% of participants discussed the importance of offering choices to personalize learning in their interviews, offered choices in their observations, and planned for choices in their learning documents. Nine of the ten participants discussed providing choices in their first answer about PL during their interview. Participants discussed or demonstrated providing choices for: literature and reading materials, seating, work environment, rubrics, resources, materials, topics, writing, method, assignment, assessment, notetaking, how to share or present, timing, examples, groupings, partners, working alone, roles in groups or class, extending activities, extra credit, and more. Through the observations, teachers offered their students a choice through 91 situations, and in the learning documents the teachers planned for offering choices in 64 situations. For example, Cono stated that she considers "what choices will allow students to master the material and demonstrate their learning in unique ways without sacrificing the standard," and then she endeavors to "create situations where students are able to have choice and bring their own interests to the classroom. Providing options for how to learn materials such as playlists, tic tac

toe sheets, or choice boards." All of the teachers valued offering choices for the reasonably easy way it improves engagement and autonomy for students.

Authenticity

The participants shared how PL allows for more authentic assessments and learning opportunities such as PBL and hands on activities. They noted that PL allows students to take an active role in creating goals for their learning, assess and reflect on their learning, and make decisions about their educational process. Brown said that prior to using a PL approach, she struggled to get students engaged with the learning because she could not always give a good reason for the activities assigned in the curriculum. She would say to students, "I'm sorry, I don't know what to tell you because this is what is in the book. And this is what I was told to do, and this is what you have to do," but she added, "it was really hard to tell them why. Because sometimes I didn't even know why...this is what I was given." After implementing hands on learning, Brown saw, "a huge difference between the motivation of students here now."

Johns also stated, "I have had very good results with certain projects that I know will hook kids in and give them opportunities to express themselves in an authentic way."

Self-Efficacy

The participants also noted that using PL approaches increases self-efficacy and student success by improving student confidence when they help students bridge the gap between their current knowledge and the standards or objectives in personalized ways. For example, Pittman stated, "When it's been most successful, it's really built confidence and capacity in my kids — made them feel accomplished and like they're prepared to tackle the work and ownership associated with genuine learning."

Table 3: Codes for Time and Resources

Theme	Sub-Theme	Codes
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Time and resources	Getting to know	Get to know students, surveys, more time, class size
	students	
	Personalizing content	Personalize content, student resources, range of tools,
		Lexile, PD, more time, class size
	Personalizing	Personalize feedback, peer feedback, range of tools,
	feedback	flexible response, PD, positive feedback, more time,
		class size

Time and Resources

Eight of the ten participants explicitly discussed the increased amount of time and resources PL takes to get to know students in order to be able to cater the course to their unique interests and abilities, to create the unique and personalized learning opportunities for the individual students in that class that semester, and to provide individualized feedback to each student about their unique performances and efforts to learn. The amount of time it takes to PL was one of the biggest challenges noted in the interviews, and that large class sizes exacerbates this issue. The amount of time to plan for PL opportunities was not as apparent through classroom observations nor learning documents as when the participants shared their experiences planning for learning in the interviews.

Getting to Know Students

All of the teachers discussed the need to take the time to get to know students through surveys, check ins, and conversations about student interests, likes, strengths, weaknesses, goals, cultures, families, learning styles, and more. Cono stated, "You have to spend more time getting to know the students and building the learner profiles and then differentiating your content for their interests and abilities. You also spend more time communicating with parents and other teachers to better serve each individual learner." Peters likewise added:

It all takes time! I often hear this debate on how to start the first week of class. Some teachers tell me to start the instruction/focused learning right away while others say take

time to foster relationships. I like to take the first few days and do a lot of relationship building, but I always find myself at the end of the semester scrambling to get through the curriculum.

The teachers discussed the need to take the time to get to know students from parent, teacher, and administration feedback as well as data from assessments such as pretests and past coursework.

Personalized Content

In a PL framework, these teachers discussed their efforts try to personalize content for students based on their interests, abilities and more while still following the provided curriculum and standards, but that all of that takes time. Kennedy stated that PL takes, "time, time, and more time." Pittman explained, "Providing personalized materials and technology tools for every student can be resource-intensive and time-intensive for me." Cono concurs that, "PL is challenging because it takes more time up front and more time to implement." The teachers used this increased time to analyze data to modify and accommodate content using a range of tools for their range of students such as texts and questions for Lexile, methods of building meaning together, and content catered to interests, abilities, learning styles, IEPs, and more for individual students or groups of students. For example, the teachers personalized student resources, technology tools, writing exercises and assignments, examples, analysis of literature based on student-selected texts, playlists, choice boards, and more. They noted that personalizing content takes time and expertise that they primarily must figure out on their own such as through personal research, coursework, and collaboration with colleagues. Most participants agreed that they had not received enough helpful professional development about personalizing content, and

without the professional development and concrete examples some teachers and students are resistant to change and fearful of it.

Personalized Feedback

Through the 10 observations, teachers gave or created a context for students to provide personalized feedback in 65 situations, and they included strategies for personalized feedback in their learning materials in 32 instances in the documents. Vaughan noted, "One challenge to personalizing learning is the extra time it takes to design, teach, and then grade and provide personalized feedback about a student's personalized work." Teachers provided personalized feedback in their writing, discussions, private conversations, answers to questions, projects, group work, pronunciations, review, and vocabulary. The teachers used frequent formative and summative assessments to provide personalized feedback to individuals or groups of students such as through class discussions, small group share outs, gallery walks, and peer feedback as long as they believed the peer feedback to be is useful and respectful. Teachers prioritized sincere praise and positive personalized feedback. The teachers said that personalizing feedback takes time and expertise that teachers primarily must figure out on their own. Brown added:

It [PL] is also more work. It's harder, and it takes more time to think creatively and say okay, instead of giving this quiz that Google forms automatically grades for me, I'm gonna do this and read every single one of my students' journal entries. It takes a lot of time. I take them home on the weekend and I go through them, and I leave them notes, and feedback. And granted I'm not married. I don't have kids, so I have extra time to do that. I'm hoping I can still do that one day when I do have those things.

Table 4: Codes for Positive Relationships

Theme	Sub-Theme	Codes
Positive relationships	Caring for students	Positive relationships, comfortable in the classroom,
		check ins, student well-being

Understanding	Get to know students, comfortable in the classroom,
students	student groupings, positive relationships
Supporting students	Positive relationships, comfortable in the classroom,
	mutual respect, class size, positive interactions, peer
	interactions

Positive Relationships

All ten participants discussed and demonstrated their positive relationships with their students during the study through their interviews and observations. Pittman noted, "There is no doubt in my mind that interactions are the most important, most meaningful part of learning!" The teachers demonstrated specific efforts to make students feel cared for, understood, and supported in order to build positive relationships with them. Throughout the observations, the teachers utilized 62 learning activities which demonstrated knowledge and care for their students such as talking to them about their pets, hobbies, social events, jobs, families, illnesses, and personal preferences. Over the learning documents, teachers included 17 situations necessitating prior knowledge of their students.

Caring for Students

All of the participants discussed or demonstrated their care for their students by considering student well-being and checking in with students. In the observations, teachers demonstrated care for the students over an average of six teaching strategies per class such as checking in with them at the beginning of class and private conversations during work periods. Brown said that personalizing learning "makes [relationships] 10 times better ...I think I actually get to know my students more and I have more time to work with them when I'm personalizing." Vaughan adds that:

Teacher/student interactions are essential. Students need to be comfortable enough to convey when they are unsure, insecure, or unable to complete a task, which is something

that is difficult to do and requires a certain amount of trust. More personal interactions with students or interactions in which I can remind my students that I am trying to work on their behalf have made the difference over and over again in reaching students' needs. Peters agreed with, "I definitely see a correlation between the relationships I have with students and their willingness to engage."

Understanding Students

All ten participants indicated the importance of having at least some understanding of the personalities and learning styles of their students. Nine of the ten participants discussed or demonstrated use of an initial survey or other get-to-know-you activity for students, parents, and or teachers to share their knowledge of student interests, hobbies, learning preferences, strengths, weaknesses, goals, and more. Vaughan stated, "personalizing works best when the student feels that their teacher knows them and cares about them." Kennedy discussed her method of getting to know students with:

First, I survey students about their interests, their strengths and weaknesses in relation to ELA skills, and what they believe are supports of or barriers to their success. Next, I take into account any IEP/504 plans which might necessitate alteration in goals or in the process towards them.

Serrano concurs with, "I spend a lot of time at the beginning of each semester getting to know my students' learning styles, personalities, and strengths. From there, I try to tailor as many of my activities as possible to feel engaging and relevant to my students." The participants used the increased knowledge of their students to personalize their lessons, content, assignments, feedback, and more.

Supporting Students

The participants also discussed their methods of building positive rapport by supporting student choices, interests, preferences, and needs. Serrano explained:

I try to keep my students' interests and abilities in mind while I am designing the framework for personalized learning. Students can tell when a teacher is genuine and wants to best meet their needs and interests, so I try to do just that while still effectively instructing them. I also have found that allowing students to choose their peers for a personalized learning activity as a group enhances the overall result and often strengthens peer relationships.

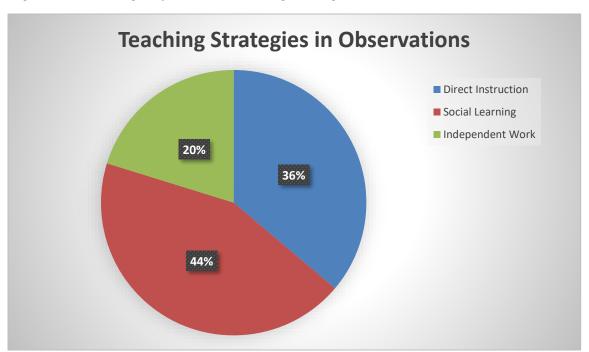


Figure 1: Percentages of General Teaching Strategies in Observations

During the observations, teachers provided more than twice the amount of social learning opportunities to build teacher-student and peer relationships as they did independent work.

Six of the participants agreed that supporting students in their choices, such as whether to work alone or with certain peers over others, helps the students to maintain a positive rapport with the

teacher and generally work better in class. For example, Cruz stated that many of her online students have "social anxiety so I don't force it. There's a reason they are online." She added that, "They are all at home and in their own safe spaces and they do not want to venture out of that." Respecting and supporting students' decisions about their own learning process was evident through interviews and observations in particular.

Table 5: Codes for Multitasking and Balancing

Theme	Sub-Theme	Codes
Multitasking and	Multitasking content	Multitasking, student behavior, student needs
Balancing	and students	
	Balancing autonomy	Balance autonomy and guidance, flexible approaches,
	and guidance	data-informed decisions, range of tools, self-regulation
	Balancing what	Standards/objectives, modifications and
	students know and	accommodations, meet students where they are,
	need to know	backwards design, universal design, data, PD

Multitasking and Balancing

Eight of the ten participants discussed the increased cognitive load of PL through multitasking student needs and their work, balancing providing autonomy and guidance, and balancing where students are with where they need to be for course objectives. For example, during the observations, teachers shifted gears based on impromptu data for 43 strategies, and in the learning documents teachers planned for changing strategies using immediate data in only 16 situations while multitasking the topics and student needs and balancing the demands of the assignment and course with the data in front of them.

Multitasking Content and Students

The participants discussed and demonstrated their expertise in multitasking the needs and work of various students throughout class time. The teachers multitasked to support students working on different topics, texts, projects, paces, and places in the curriculum at the same time.

During the 34 direct instruction strategies, 41 socialization strategies, and 19 independent work strategies observed in the classrooms, all the teachers demonstrated a strong ability to be cognizant of multiple student needs, behaviors, work completion, and much more at all times and situations. During the lessons, teachers would pause a conversation to ask another student to get back to work or respond to a group working ahead to prepare to present first or provide feedback from memory on multiple projects from multiple points in the curriculum all with a few minutes of class time. Cono stated, "It can also be chaotic to manage when the students are all working on different things at different times, so you have to be able to switch to many topics in your brain competently while also managing on task behavior for the learners when they are given more free rein." Vaughan agreed with, "Another challenge is managing the pace and needs of all of the different students in my classroom."

Balancing Autonomy and Guidance

Half of the teachers explicitly shared their efforts to balance providing students with freedom in the classroom to promote autonomy and guiding the students to make the best choices to learn the material in targeted ways. When asked to describe her process of personalizing learning, Pittman stated that she works to "strike a balance between granting students' autonomy to choose their learning paths and providing guidance to prevent them from feeling overwhelmed or directionless." She went on to elaborate that "some students struggle with self-regulation and time management in a personalized learning environment, as they need to take more responsibility for their own learning." Vaughan agreed with:

I try to decide when it's best to let the student make their own choices about how to study for a test, work through the writing process, or complete a project, and when I need to step in and provide some structure for their choices. Part of that decision making process happened organically in the observations when teachers saw students struggling or lacking in engagement, and they would step in to provide more structure or a different approach to learning. Cono stated:

I also have to be flexible in the moment to see what is working or what needs changing even with seating or timing or resources. I constantly make little decisions or even big ones on the fly based on the data presented to me in the moment and my historical knowledge of the learners and the topics.

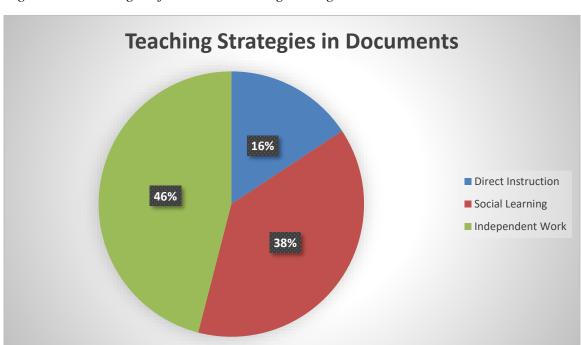


Figure 2: Percentages of General Teaching Strategies in Documents

While teachers only planned for 16% of teaching strategies to be direct instruction in the learning documents, they used 36% of teaching strategies as direct instruction during the observations. The teachers drew upon a range of tools, including technology tools to flexibly respond to immediate, unplanned for needs during class time. Over 10 observations teachers shifted gears based on impromptu data for 43 strategies, and over 20 learning documents teachers planned for changing strategies using immediate data in 16 situations. Teachers would often see, hear, or

read feedback from students about the material and spontaneously provide specific and personalized feedback in the moment to redirect, reteach, or clarify student understandings in individual, small group, large group, and entire class situations. The teachers regularly balanced providing their students with the space and options to control their own learning process but stepped in as necessary to guide the students on their learning path.

Balancing What Students Know and Need to Know

Nine of the ten teachers discussed the need to help all students reach the objectives, standards, or goals for their courses, starting from the student's prior knowledge and abilities. For example, Kennedy explained, "Choices are based on what we are trying to accomplish, and where the students are individually, and as a group. From there, we backtrack and decide how much pre-teaching, teaching, and re-teaching is necessary for groups and individuals." Vaughan agreed with, "the success or failure of the personalization should be reflected in the students' achievement on these assessments, which in turn are aligned with standards and learning objectives." Serrano added that doing so is a challenge with, "I also struggle at times to create activities that are interesting to students while still covering necessary course content and skills." Walls said that she starts planning PL by "deciding what's the objective for the lesson and what they need to achieve for me." The teachers acknowledged that their goal for the course is to bring all students up to the objectives or standards from the curriculum and tested material, and they personalize by how they help students achieve those goals through scaffolding.

Outlier Data and Findings

While the ten participants had similar thoughts, reflections, experiences in observations, and plans for learning, they did not all share the exact same opinions or experiences related to PL.

Relationships for Exclusively Online Students

Cruz teaches students entirely online, and although some students come into her classroom for part of the day for part of the week, they are not all there physically each day.

Thus, she struggled the most to build relationships with her students because she was not always able to communicate with them at all, let alone do so clearly. Cruz stated:

It's online so it's a challenge to get them to cooperate and get to know them. There's miscommunication. I communicate with parents every week but don't hear back, so that's really hard. I want to help but can't help because they're not responding to me. I don't get a lot of response so that's really hard. I want to help but I can't help because no one's sort of responding.

The other nine teachers experienced more positive relationships with the students because they saw them face to face every day.

Immaturity in the Middle Grades

The middle school teachers shared more reservations about providing choices or acting too familiarly with students than the high school teachers. Walls indicated:

They struggle with expectations even when they are clearly laid out and explained every day. On a field trip last year, ...the 8th graders were throwing stones and touching each other. It's middle school and they are always weird in middle school...Sometimes with certain classes they have a wall there between teachers and students and it can be a good thing...If we have good relationship that can backfire, and they can be crazier than usual.

The teachers dealing with upper classmen offered choices to their students which had a greater effect on their learning process, such as how to present the skills they learned, whereas the

middle grade teachers generally offered choices with smaller repercussions such as taking notes on paper or the computer, and working with a partner or independently.

Research Question Responses

The ten participants provided insight into the secondary ELA teachers' experiences while personalizing learning. Data collected through semi-structured interviews, observations, and document analysis offered a glimpse to this study's central research question and each sub-research question. The follow sections provide explanations and narrative examples relevant to the research questions undergirding this study.

Central Research Question

How does personalized learning affect the lived experiences of ELA teachers? The participants shared the positive and negative experiences of personalizing learning to engage their students, build relationships, and help the students achieve standards of their subject area and curriculum; however, these positive effects come at a cost of increased time, resources, and mental energy to enact a PL framework. The teachers spent much of their interviews describing their methods of providing choices and scaffolds to their learners, and much of the observations and planning in their learning documents to engage and reach students based on their abilities and interests. Cono stated, "The strategies I use for personalized learning are providing options for how to demonstrate learning...how to interact with material... and how to improve from feedback." Pittman elaborated with, "Providing personalized materials and technology tools for every student can be resource-intensive and time-intensive for me. Also, personalized learning always requires more effort in terms of creating or adapting materials, tracking progress, and providing individualized feedback."

Sub-Question One

How do secondary ELA teachers experience the use of specific strategies to support personalized learning? The teachers discussed, used, and planned for many different strategies to support PL such as by offering choices to their students, scaffolding assignments and materials, and providing personalized feedback. For example, Vaughan stated, "I've seen students working on this assignment create beautiful works of art, technical plans and digital designs, musical compositions, and thoughtful essays, all in the same class and all offering insight into the themes and tone of the text." Kennedy likewise shared strategies for voice and choice such as offering, "some exceptionally cool book projects where students are choosing a book, and then choosing how to present it, but the media choice (on paper, digital, 3D printed, ceramic, wood...etc.) is entirely up to them." Additionally, Serrano gave:

students six different options for their *Romeo and Juliet* unit assessment project. These options included a video, social media account, podcast, alternative ending, and others. Students created outstanding and engaging projects that clearly displayed their knowledge of the play while making it clearly more accessible and engaging for themselves and their peers.

Sub-Question Two

How do secondary ELA teachers maintain meaningful social interaction within a personalized learning framework? All of the teachers expressed the importance of positive relationships with their students in any educational setting, not just when personalizing learning. Pittman stated:

It's so important to be a source of support for students' overall well-being, not just their academic well-being. We need to constantly demonstrate care and concern for them as people, and make sure we're addressing and meeting their social and emotional needs.

The teachers fostered student-teacher relationships by getting to know the students initially and then maintaining regular, informal check-ins with their students through each class and semester. The teachers struggled more to force positive relationships between students but generally preferred to allow students to choose their partners and groups when possible.

Sub-Question Three

How do challenges affect the experiences of secondary ELA teachers personalizing learning? While the teachers willingly shared the benefits of PL, they also readily expressed the increased demands on their time, resources, and cognitive load that the framework necessitates. Kennedy stated that the challenges include a "lack of time to plan for each student's needs, lack of materials at the secondary level for those struggling with reading, and lack of content specific training." Cono also stated:

It [PL] can also be chaotic to manage when the students are all working on different things at different times, so you have to be able to switch to many topics in your brain competently while also managing on task behavior for the learners when they are given more free rein.

While these challenges were not insurmountable, the teachers expressed frustration about them throughout their interviews and in the observations.

Summary

The purpose of this transcendental phenomenological study was to understand the lived experiences of secondary English language arts teachers implementing personalized learning in Southeastern Pennsylvania. After synthesizing codes from interviews, observations, and document analysis, four themes describing the rich experiences of secondary ELA teachers endeavoring to personalize learning arose. The teachers demonstrated the common themes of

student engagement, time and resources, positive relationships, and multitasking and balancing to express the phenomenon of personalizing learning for secondary ELA students. The experiences of these teachers varied from three to thirty years of experience, they taught at one of three different schools, seven of the ten participants taught high school while three participants taught middle school, and one participant taught exclusively online. These varied experiences helped illustrate the complexity of personalizing learning for ELA content with different levels of students, curricula, modes of teaching, and range of experiences of the professionals.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this transcendental phenomenological study was to understand the lived experiences of secondary English language arts teachers implementing personalized learning in Southeastern Pennsylvania. Secondary ELA teachers shared their experiences of personalizing learning through interviews, observations, and document analysis to inform a thorough understanding of the rich phenomenon of using PL to teach secondary ELA. Chapter Five includes a critical discussion of the findings based on the data as well as theoretical and academic literature, implications for policy and practice based on the existent literature and theory, theoretical and methodological implications for consideration, the practical limitations and delimitations of the research, and recommendations for future research.

Discussion

PL is a growing topic in education (Bingham, 2017; McHugh et al., 2020), and teachers need more insight into what using this framework could realistically entail (Basham et al., 2016; DeMink-Carthew & Netcoh, 2019; Pane et al., 2017). This section includes interpretations and implications of the findings of this research to help illuminate the experiences that secondary ELA teachers purposefully attempting to personalize at least some aspects of their students' educational experiences go through. Thorough interpretations of the raw data from interviews, observations, and document analysis of secondary ELA teachers, paired with scholarly literature and theory provide a clearer picture of the phenomenon in question.

Critical Discussion

After researching the experiences of secondary ELA teachers personalizing learning for their students through interviews, observations, and document analysis, four major themes of universal experiences arose. These themes inform five interpretations of the phenomenon to provide a more comprehensive view of the experiences of teachers personalizing learning in secondary ELA. This section provides further explanation into new insights and understandings from the research inquiry.

Summary of Thematic Findings

After producing relevant codes from the three sets of data from the three schools, those codes were synthesized into four themes about personalizing learning: student engagement, time and resources, positive relationships, and multitasking and balancing. These themes informed several interpretations around the experiences of teachers personalizing learning. These five findings are grounded on the SDT, which is a student-centered theory that states students must actively participate in learning to construct knowledge (Vygotsky, 1978). The SDT was an important step towards constructivism in education where teachers began to set up learning opportunities for students to actively construct knowledge (Erbil, 2020; Tzuo, 2007), which in turn helped create PL (Nagle & Taylor, 2017). Using SDT, if students reflect on their internal cognition after participating in social learning using quality communication, then learning ensues (Erbil, 2020). The two most popular tenets of SDT which are vital to PL are using a more knowledgeable other to pass on learning such through a teacher, peer, or technological tool, and scaffolding learning opportunities so students stay within their ZPD. Both aspects of SDT were ubiquitous in the data of this study and helped undergird the discussion around the experiences of secondary ELA teachers using a PL framework.

PL increases cognitive load and time investments for teachers. Using a PL framework in secondary ELA is more time consuming and mentally demanding than traditional models of education. When personalizing learning for secondary ELA, planning for, finding resources for,

creating, dynamically implementing, and providing personalizing feedback about personalized learning opportunities, teachers spend much more time and mental energy than when they provide all students with the same lesson, materials, and assignment. As teachers transition to a constructivist approach through scaffolding, they will begin to curate resources, instructional items, opportunities, and items of interest for students (Bishop et al., 2020). In this study, Pittman stated, "Providing personalized materials and technology tools for every student can be resource-intensive and time-intensive for me. Personalized learning always requires more effort in terms of creating or adapting materials, tracking progress, and providing individualized feedback." All the effort to personalize for one class, semester, or year will also not necessarily translate to less work the next year. Tomlinson (2017) explained that no one way to personalize learning will work for every school every year, and thus once teachers create personalized materials or assignments for the semester, they cannot just recycle all the same resources in the same way for their next group of students. Johns from this study stated, "Personalization is an ongoing evaluative process that demands pragmatism." The process is time consuming for each class of learners as teachers work to get to know each new student and cater the learning process afresh for that individual's interests and skills. The ELA teachers in this study did not rely extensively on technology tools to do the work of personalizing learning paths for their students, but instead gathered the data and made decisions about how to best support each student in each situation on their own. Teachers use this data and personalized objectives where appropriate to provide feedback for individual or small group projects (Bishop et al., 2020). They use their knowledge of and relationships with students to personalize and scaffold the content firsthand.

Another aspect of PL for secondary ELA teachers which increases cognitive load is providing the appropriate level of autonomy for students to make their own choices about self-

regulation, time management, and learning activities and then chunking, modeling, teaching, and guiding students to make good decisions such as through creating individualized timelines. Based on historical and immediate data and student engagement, teachers actively trying to personalize learning flexibly respond to individual students, groups, or the whole class about topics and content, seating and resources, activities, timing or pacing, behavior, and more which is more mentally demanding than creating a lesson plan and doggedly following it. In order to effectively make flexible responses, teachers must also have a range of tools at their disposal which takes time to prepare, practice, and implement well. In PL, teachers move from primarily delivering direct instruction to facilitating an active, student-centered learning process where students learn by doing (Educause, 2018), which is a big shift from the traditional expectations for teachers and may be challenging for teachers to navigate (Netcoh & Bishop, 2017; Li & Wong, 2021). In this study, Peters stated:

I want to be "in control" mostly because it is more predictable for me. Whenever you put things in the hands of students, there is the unknown, and that is unsettling for me. I find that many students, especially since Covid-19, just want to get the work completed and move on rather than investigate or take the time to be creative or thoughtful. Often, they want the teacher to just tell them what to do or read.

The student-centered focus of PL causes a shift in control from decisions being made by the teacher alone, to teachers co-deciding with students, or even the teacher empowering the learners themselves to make educational decisions (Bishop et al., 2020). Allowing students to have autonomy over their learning is still developing in the field of education (DeMink-Carthew & Netcoh, 2019; Netcoh & Bishop, 2017; Pane et al., 2017; van de Pol et al., 2014). One method of transferring agency to students is scaffolding for students to learn within their ZPDs to

eventually become independent at the skill or content (Wu et al., 2012). As students take control of their learning and make important decisions, they need direct instruction and scaffolding to be able to learn how to self-regulate and make informed decisions (Basham et al., 2016; Bingham, 2016; Bingham, 2017; Kallio & Halverson, 2020). Just as creating personalized content is challenging each semester, deciding how to transfer control of the learning process in the most responsible and successful way for each learner and class is also difficult in each new situation. Overall, secondary ELA teachers who use a PL framework invest additional time, resources, and cognitive load to curate meaningful, PL experiences for their students.

Choice is engaging but must be used correctly. Despite the increased time and effort to personalize learning, the teachers attempting to provide individualized learning opportunities to their students continue to invest the time and resources because it increases student engagement and self-efficacy, most often through the use of voice and choice. PL is often defined as a student-centered educational framework that offers voice and choice to students (DeMink-Carthew & Netcoh, 2019; Mötteli et al., 2021; Schmid & Petko, 2019; Schmid et al., 2022). In PL, teachers provide choices to students to cultivate their interest in the material which increases growth and achievement (Alsobhi & Alyoubi, 2019), autonomy (Alamri et al., 2020; Deci & Ryan, 2000), competence (Alamri et al., 2020; Netcoh & Bishop, 2017), motivation (Alamri et al., 2020; Deci & Ryan, 2000; DeMink-Carthew & Olofson, 2020; Shemshack & Spector, 2020; Walkington & Bernacki, 2020), engagement (Deci & Ryan, 2000; DeMink-Carthew & Olofson, 2020; LeGeros et al., 2022; Shemshack & Spector, 2020), understanding (Shemshack & Spector, 2020), persistence (Bernacki & Walkington, 2018), responsibility (Netcoh & Bishop, 2017), selfefficacy (Walkington & Bernacki, 2020), and motivation for ELA skills (Leuttchau, 2021; O'Loughlin, 2021). All of the participants of this study discussed and/or used choice to engage

their learners in the content. Secondary ELA teachers may offer choices for literature, seating, work environment, rubrics, resources, materials, topics, writing, methods, assignments, assessments, notetaking, how to share or present, timing, examples, groupings, partners, working alone, roles in groups or class, extending activities, extra credit, and more. Secondary ELA teachers generally feel positively about allowing learners to have voice and choice in many aspects of the learning process.

However, teachers need to teach students how to make choices and cater those choices to the students in the room to guide them through the process. Too much choice can be debilitating (DeMink-Carthew & Netcoh, 2019), so students must also learn how to make choices on their own (DeMink-Carthew & Olofson, 2020). One way teachers help facilitate making choices in the classroom is through including clear objectives and rubrics for all project choices. When offering choices, teachers must create a list of options for how students may demonstrate their knowledge in differing but equitable ways, along with the rubrics for those choices based on standards (U.S. Department of Education, 2017). Secondary ELA teachers may work to ensure all the choices and options offered in their classrooms are unique and creative but equally aligned to standards or objectives and rubrics.

Relationships improve PL and PL improves relationships. PL helps teachers get to know students better initially, and then provide sincere praise and positive feedback throughout the course which helps build positive relationships and overall increases student self-efficacy and engagement in learning. The participants noted that students appreciate feeling known and having connections with teachers which is easier to do in a PL environment. While only one participant used the phrase, "learner profile," all of the teachers purposefully gathered data about each student at the beginning of the semester to better cater the course, scaffold the activities,

and build positive relationships with their students. LPs include information on the student's strengths, weaknesses, motivations, interests, family life, and more, and will be updated, usually by the learner, as he or she changes over time (Shemshack et al., 2021). The participants did not describe a formal organizational system of data about students that the students themselves curate and edit, but they did all try to get to know their students and record that information for future use. Secondary ELA teachers gather information about their students to better engage them in the learning and build a positive rapport with them, even if they do so informally. Curating positive relationships and rapport with students is better through PL because teachers try to demonstrate care and concern for individual students in one-on-one check ins, class discussions, and general conversations about their lives, social and emotional needs, and general wellbeing. The easiest relationship to foster within a PL framework is the teacher-student relationship (LeGeros et al., 2022). When personalizing learning, teachers get to know students better by learning about their interests which helps build stronger relationships (Kibler et al., 2019; LeGeros et al., 2022; Murphy et al., 2016; Netcoh & Bishop, 2017; Wright et al., 2019). To be supportive of individual students in PL, teachers must curate quality interactions and relationships (Schmid et al., 2022) which they have time to do since PL necessitates more oneon-one interaction than whole group instruction (Pane et al., 2017; Wright et al., 2019). Secondary ELA teachers use frequent one-on-one check ins to provide feedback to learners but also to demonstrate their care and concern for them outside of class.

Secondary ELA teachers personalizing learning tend to value fostering peer relationships and classroom community over offering individualized paces of learning through the curriculum. Good PL includes facilitating peer-to-peer interaction for peer support and the ability to learn from one another (Li & Wong, 2021; Porath & Hagerman, 2021). Teachers help students feel

comfortable to share by building trust with them through being honest and providing sincere praise, and generally being positive, patient, and understanding. Teachers also build trust from students by demonstrating respect for them through respecting their privacy in one-on-one chats, respecting their choices in the classroom, and encouraging them towards vulnerability and mutual respect. Students work better when they believe the teacher cares about them and meets them where they are academically and socially. Understanding how community affects the learning process is important for teachers to foster positive learning environments (Ryan & Patrick, 2001). Learning is social (Bandura, 1977; Dishon, 2017), and classrooms are social places (Ryan & Patrick, 2001). While secondary ELA teachers offer some variety of pacing for when to complete sections of projects or readings, they generally keep students moving through content at the same pace to allow for classroom community, social learning, and increased opportunity for whole class formative feedback.

One important component of PL that teachers use to improve student success is frequent, personalized feedback (Debs et al., 2019; Li & Wong, 2021). According to Major et al. (2021), frequent feedback is one of the top three themes of PL along with individualizing instruction for student interests and adjusting activity levels and paces based on student needs. In this study, the participants provided individuals, small groups, or the whole class with immediate personalized feedback in over 50% more situations than they had planned for in their lesson plans and learning documents based on their knowledge of the individual learners and the class dynamic and discussions in the moment. Secondary ELA teachers use their knowledge of their students from their relationships with them to provide learners with frequent, specific feedback, including ample positive feedback, which in turn further strengthens those relationships.

Relationships can be encouraged but not forced. Teachers curate positive relationships by getting to know students and bringing their students' lives, interests, and abilities to the classroom such as through surveys, feedback, journaling, and assessments, but teachers find it more difficult to foster positive peer relationships between all learners in the room. Students often prefer to be able to choose their own partners or groups based on who they know and feel comfortable working with, but grouping students by interest, ability, or topic choices can also promote positive relationships and collaboration. Serrano explained, "I...have found that allowing students to choose their peers for a personalized learning activity as a group enhances the overall result and often strengthens peer relationships." Students like working with peers they already know and trust. Teachers can model vulnerability to help students build new relationships with peers by sharing about their selves, lives, culture, experiences, and backgrounds in developmentally appropriate ways, but language or cultural barriers may persist. To provide an atmosphere which encourages healthy vulnerability, students need support from their teacher through positive relationships and feedback, clear communication that is respectful of the student and parents, and students need support from peers such as through helpful and respectful feedback and interactions in gallery walks, group work and collaboration, partner work, and general peer feedback. Even relationships built on care differ from person to person, and instructors must foster positive relationships within context (Garcia et al., 2021) for teacherstudent relationships as well as peer relationships to the best of their ability.

Teachers must also balance the need to combat student apathy and preferences to work independently or entirely online with social objectives in the course. DeMink-Carthew and Netcoh (2019) argue that teachers must purposefully build in peer interaction such as feedback in a PL framework otherwise students struggle with exclusive independent work. Missing out on

peer relationships and interactions negatively affects social interaction in the classroom, which is particularly important in discussion-based courses such as secondary ELA (Schieble et al., 2020). Secondary ELA teachers may struggle to build a connection with a student if they do not want to share about their lives or communicate or prefer to work online. One participant from this study, Cruz, who teaches entirely online stated, "It's online so it's a challenge to...get to know them. There's miscommunication...I want to help but can't help because they're not responding to me." One common criticism of PL is the lack of social interaction inherent when students spend their time on unique activities at disparate paces and in separate places (Alamri et al., 2020), and that social emotional learning is often entirely left out of digital coursework or pedagogy (Basham et al., 2016). In this study the educational situations using less technology did seem to foster better relationships for teachers and students, but respecting student choice about how to learn and with whom was also important to the teachers, even if that choice resulted in some more superficial relationships.

100% PL is not feasible in the current reality of education. Secondary ELA teachers use data and student engagement on pretests, prewrites, formative and summative assessments, class discussions, historical data, and IEP and SDI information to pre-teach, teach, and reteach standardized content and skills to individuals and groups. Schools overall must perform well on external metrics such as standardized tests to earn money from the state and sometimes even stay in operation (Bingham et al., 2016; Pane et al., 2015), including schools that use PL (Halverson et al., 2015). Teachers may struggle to balance the topics that students are interested in and the content that is assessed based on standards (LeGeros et al., 2022). In this study, Kennedy stated, "Teaching a tested course means that I have to get through specific content and there is limited time to do more project-based learning or choice. Also, my curriculum is specific in

assessments." So, teachers use backwards design, universal design, and quality teacher strategies based on data to ensure that all students are able to achieve the standards and objectives, especially if they are provided with the professional development to do so, but all of the students are headed in that direction at basically the same pace. Instructors have access to more data than ever (Gašević et al., 2017) to provide data-informed real-time feedback at scale (National Forum on Educational Statistics, 2019; Pardo et al., 2019), and are expected to use technology to analyze and act on this data (Bingham, 2017; Kallio & Halverson, 2020; Nagle & Taylor, 2017). However, nine of the ten participants in this study indicated a lack of helpful professional development about PL in general, including using technology to PL. Overall, the participants in this study used few of the components of PL indicated as possible in the literature such as PLPs, LPs, and CBAs despite the clear indication of personalization as a part of their schools' visions or missions because of the lack of administrative support through professional development about using PL strategies such as technology and a lack of school-wide PL structures such as PLPs and FLEs.

Implications for Policy and Practice

Teachers looking to personalize learning benefit from seeing the successes and failures of other teachers' experiences using PL strategies, and the subsequent effect on learning and classroom dynamic. Studies have looked at other subjects such as math, but few studies focus on the experiences of ELA teachers (Walkington & Hayata, 2017). McCarthy et al. (2020) added that the best practices for personalized learning are still evolving as teachers and researchers work to understand what is effective based on the goals. While the findings of this study are not necessarily proven to be best practice, they do reflect the current reality of the experiences of secondary ELA teacher using PL as a framework for teaching in Southeastern Pennsylvania and

thus have implications for practical, theoretical and empirical significance.

Implications for Policy

Government officials from the U.S. Department of Education have passed initiatives to personalize learning based on new educational technology, such as the Every Student Succeeds Act of 2015, the National Education Technology Plan of 2016 developed by the U.S. Department of Education, and the Race to the Top initiative of 2015. These officials have encouraged school districts to personalize learning with the hope of improving test scores, engaging students, and creating more capable citizens in these initiatives (Basham et al., 2016; Bishop et al., 2020; McCarthy et al., 2020). However, PL presents a big disruption to a traditional framework for education and teachers and administrators must make the decision to restructure learning based on quality research (Basham et al., 2016; DeMink-Carthew & Netcoh, 2019; Pane et al., 2017). Netcoh and Bishop (2017) found that teachers need professional development in areas such as scaffolding student-led learning and facilitating various projects at once to be successful with PL. Likewise, secondary ELA teachers in this study such as Cono stated:

It [PL] can also be chaotic to manage when the students are all working on different things at different times, so you have to be able to switch to many topics in your brain competently while also managing on task behavior for the learners when they are given more free rein.

Practitioners and researchers of PL are finding implementation challenging and desultory (Schmid et al., 2022). Teachers attempting to personalize learning must also curate resources such as educational technology and pair those tools with effective pedagogy (New Media Consortium, 2016). To implement PL well, teachers must receive professional development, tools, and support (Basham et al., 2016; Tomlinson, 2017). If policymakers continue to push

initiatives for schools, including providing incentives for using PL strategies, they need to support research and resources to help administrators and teachers make informed decisions about how to change educational structures in their schools and classrooms. Deciding professional development to administer is difficult because PL best practices are still evolving (McCarthy, Liu, & Schauer, 2020; Pane et al., 2017). With enough professional development, the use of technology to personalize learning decreases teacher workload (Shemshack & Spector, 2020). Administrators in particular must select and provide high quality professional development about multiple strategies for PL including using educational technology for teachers they expect to use PL strategies in their pedagogy. This professional development must be targeted to specific grade and content levels so that teachers can implement the new policies with confidence. For example, in this study Kennedy complained that she has received a:

lack of content specific training. I have 30 years of experience at this point, but rarely have I received any training that drills down to the level that would be useful in the classroom. Usually it is a "Just Do It" decree, or a few examples that someone in administration or a training session leader think will apply, but really don't.

Secondary ELA teachers need targeted professional development such as how to manage the increased cognitive load, multitasking, and balancing necessary for managing a PL environment; how to curate, create, organize, scaffold, and implement PL resources and content in pursuit of standardized objectives; how to teach learners the necessary skills for success in a PL environment such as self-regulation, making good choices, time management, and self-advocacy; and how to consistently provide specific, timely, personalized feedback for learners. Educational technology in particular may be able to decrease the demands, such as providing personalized feedback through the use of new artificial intelligence technologies (Li & Wong, 2023), but

teachers should not be expected to find, learn how to use, and implement new technologies on their own. Other than professional development, administrators valuing PL in their districts and schools also need to consider school-wide resources such as providing better FLEs including communal meeting places, flexible bell schedules or pacing, nontraditional grade calculations, as well as providing for school-wide management systems such as learning progressions and PLPs. Finally, most of the participants in this study acknowledged the increased difficulty of personalizing learning when class sizes become too large. Administrators have a responsibility to determine a maximum class size for courses with time and resource intensive methods to PL and then maintain a cap for those classes when scheduling students to help set up teachers manage the cognitive load and resource investment of PL.

Implications for Practice

These findings indicate that teachers, parents, and students require additional supports for success in a PL environment whether or not their administrations roll out district-wide or school-wide initiatives and targeted professional development. Regardless of whether administrators or teachers prompt the transition to PL, PL continues to grow in popularity (Bingham, 2017; McHugh et al., 2020) and thus those affected by or implementing PL need to understand how it can be done well. First and foremost, teachers are at forefront of the PL strategies in the classroom which engage learners in their ZPDs based on their interests and abilities. Teachers need more time and support to manage the increased workload required to PL, not just during the first semester they attempt to implement more targeted PL strategies, but consistently throughout their teaching process. For example, separate participants in this study indicated, "It all takes time!" (Peters), "One challenge to personalizing learning is the extra time it takes to design, teach, or grade a student's personalized work" (Vaughan), "[PL] takes time, time, and more

time...[There's a] lack of time to plan for each student's needs" (Kennedy), "We spent more time on certain things [in PL] than the other teachers...to make it stick" (Brown), and "Providing personalized materials and technology tools for every student can be resource-intensive and time-intensive for me" (Pittman). Secondary ELA teachers struggle to incorporate the PL strategies that they do use because of resource constraints such as a lack of time. Other than simple time constraints, aligning PL with standardized tests and other traditional institutional practices is also a key challenge (Bingham et al., 2016; Han et al., 2014); implementing PL and administering standardized tests is hard on teachers (Han et al., 2014). Secondary ELA teachers need to be realistic about their time and objective constraints when considering how much PL opportunities to embed or alter in their classrooms. However, many secondary ELA teachers value and celebrate increased rich relationships as well as student engagement due to PL, so they may see these investments and challenges as worth the effort.

While not discussed as widely in this study nor the literature, parents are also a key stakeholder in the success of PL and thus should be aware of the change in expectations for their children and about their own role in the process. Some of the teachers in this study indicated the importance of working collaboratively with parents to curate more robust LPs and support learners in their personal goals, weaknesses, and strengths. Cruz explained that without parent buy in, she struggles to connect well with learners she may not see as often in the classroom. If a school or district transitions to even more formal PL than the settings described in this study, parents would need to have a more active role in supporting the student-led educational decisions and considerations in the classroom.

Finally, the students themselves are most affected by the success or failure of PL strategies. In PL, students must eventually learn how to make choices on their own (DeMink-

Carthew & Olofson, 2020) and have a decisive role in their own educational experiences (Nagle & Taylor, 2017; Tomlinson, 2017). Thus, students also require time and training to work well in a PL framework (Schmid ed al., 2022). Teachers must purposefully use modeling, scaffolding, and other strategies to teach self-regulation skills (Schmid ed al., 2022), self-awareness (DeMink-Carthew & Netcoh, 2019), and autonomy (Bingham, 2016; Bingham, 2017). If students are not taught how to make good choices about their future based on data, they may not choose to study all the content or practice the skills necessary to be successful (Horn, 2017). Secondary ELA teachers may struggle to facilitate the transition to self-regulation and rich peer relationships in more individualized environments which would in turn negatively affect the learners in their care. For example, in this study Pittman stated, "The human tendency to resist change is very real, for kids and adults alike," and that fostering relationships between students is "a little trickier" (Vaughan). Students must be on board for any large shifts in their educational experiences such as making good choices, using nonstandard grading systems, and collaborating with diverse peers.

Theoretical and Empirical Implications

Theoretically, the findings of this study indicate that the SDT (Vygotsky, 1978) is a solid foundation for secondary ELA teachers to build their PL strategies on. Teachers have long considered individual differences between students to better serve them (Tomlinson, 2017), but specific PL strategies task teachers with using even more constructivist approaches paired with rich relationships than in other traditional contexts. In this study, the secondary ELA teachers built strong relationships with their learners and used those relationships as well as data collected about individual student interests, strengths and weaknesses, and learning goals to scaffold and personalize the learning process at similar paces and towards the same objectives as all of the

other learners in the class. Theoretically speaking, this medium level of personalization allows for individual differences and choices by unique learners while also maintaining whole class community and the possibility of peer relationships and collaboration. Secondary ELA teachers may be reticent to offer more personalized opportunities such as unique paces of instruction or individualized course objectives because those situations may require too many teacher resources to facilitate well, they may sacrifice social interaction, and they may not reach school mandates for preparing students for standardized tests. Likewise, secondary ELA teachers with a goal of PL may be reticent to offer fewer personalized opportunities because the learners' engagement, self-efficacy, and teacher-student relationships may decrease without those individualized considerations. Using learning facilitators such as teachers and peers to provide students with a more knowledgeable other to guide new learning through rich relationships while also maintaining learning experiences within each individual student's ZPD effectively balances individual engagement and socialization in PL.

Empirically, this study was similar to other qualitative studies that describe the experiences of teachers attempting to personalize learning for their students (DeMink-Carthew & Olofson, 2020; Nagle & Taylor, 2017; Netcoh & Bishop, 2017). The participants of this study indicated similar successes and challenges of PL as other studies about teacher experiences such as increased student engagement but difficulties in realistic implementation. However, unlike those studies that describe what personalization in general, this study focused on the experiences of ELA teachers at the secondary level as they incorporated meaningful interaction, which is crucial to ELA standards (PDE, 2014), within a PL framework. ELA content necessitates the need for teachers to build an increased knowledge of learners to personalize the materials and

assignments and rich interactions to scaffold and provide feedback about those learning opportunities from teachers as well as peers.

Limitations and Delimitations

In this phenomenological study, the participants were limited to secondary ELA teachers who are currently teaching 7th to 12th grade courses while incorporating purposeful PL strategies to meet the needs and interests of their diverse learners within the geographic area of Southeastern Pennsylvania. A high school and middle school from one county were included in this study as well as a high school from a different county in Pennsylvania. Sixteen superintendents were contacted for permission to collect research from teachers within their districts, but only five superintendents provided permission to proceed. Within those five districts, 94 potential participants were contacted on three different occasions until ten participants agreed to participate in the study. Six high school teachers from School One agreed, one high school teacher from School Two agreed, and three middle school teachers from School Three agreed to participate in the study, all of whom teach in suburban settings. Only two of the participants are male, three participants teach middle school, and only one participant teaches exclusively online. Therefore, this study was limited in the breadth and variety of experiences about PL in secondary ELA.

Additionally, although all three schools indicated a desire to provide PL, the administration in these districts have not yet provided enough targeted professional development to the teachers to personalize beyond providing choices and scaffolds learned using primarily outside learning opportunities to figure out how to do so. All of the superintendents of districts within this geographic region of Southeastern which offer more intense personalized opportunities such as PL courses, PLPs, school-wide LPs, curriculum supports for PBL or

gamification or flipped instruction and more declined to allow their teachers to be participants in this study. All of the participants in this study taught the same content at the same time to their learners but offered choices and scaffolds within those constraints.

Recommendations for Future Research

Recommendations for future research include recreating the same study at PL schools to include more variety of participants from a greater variety of schools and districts to better represent the reality of personalizing secondary ELA content in additional circumstances not represented here. Future research on the art of maintaining social interaction in more personalized conditions is important to understanding the experiences and realities of secondary ELA teachers facilitating that process. Understanding the experiences of participants who have received targeted professional development for personalization in secondary ELA would provide other teachers in various stages of the process of transitioning to PL with lessons about the successes and challenges of that experience. Similar studies could also focus on high school teachers teaching content which necessitates rich discussions and classroom community such as ELA and social studies in comparison to PL in the STEM fields.

Other types of research studies such as case studies, applied research, mixed-methods research, and quantitative research would also help create a more comprehensive picture of the nature of PL at the secondary level. A case study analyzing the experiences and decision-making process of various stakeholders such as administrators, guidance counselors, teachers, parents, and students in a personalized environment would help those stakeholders better communicate and understand the experiences of those they collaborate with in PL situations. Applied research or mixed-methods research could give more nuanced views about the dynamic nature of the reality of a secondary school using PL. Additionally, future research of a quantitative nature

about the process of implementing or using PL strategies would improve administrative and practitioner understanding of effective and noneffective strategies. Collecting data from standardized tests and other assessments, even in relation to non-standardized assessments such as the writing of essays in ELA, could compare the effectiveness of PL to traditional styles of learning in secondary ELA for reading, writing, speaking, listening, and analytical skills (PDE, 2014).

Conclusion

Overall, PL has increased in popularity in recent years (Bishop et al., 2020; McHugh et al., 2020) with administrators tasking more teachers than ever to customize learning using quality teaching strategies and resources (Mötteli et al., 2021; Schmid et al., 2022). However, little research on PL focuses on the experiences of teachers as they strive to personalize learning well by including a variety of activities to promote individual efforts and meaningful interaction (DeMink-Carthew & Olofson, 2020), such as in an ELA classroom. The purpose of this transcendental phenomenological study was to understand the lived experiences of secondary English language arts teachers implementing personalized learning in Southeastern Pennsylvania. This study was grounded on the SDT, which is a student-centered theory about constructing learning through more knowledgeable others within a ZPD (Vygotsky, 1978). In this study, secondary ELA teachers shared their experiences of personalizing learning through interviews, observations, and document analysis to inform a thorough understanding of the rich phenomenon which resulted in four themes: student engagement, time and resources, positive relationships, and multitasking and balancing. Analysis of these themes added to the literature about PL by demonstrating that PL increases cognitive load and time investments for teachers, relationships improve PL and PL improves relationships, relationships can be encouraged but not forced, and 100% PL is not feasible in the current reality of education. Policy makers and administrators must provide more support through research, resources, and professional development to help teachers manage the increased cognitive load and time investment to personalize learning at the secondary level for ELA. Secondary ELA teachers may value and celebrate the rich relationships and engagement of PL while also experiencing the frustrations of the increased cognitive load and resource investments necessary to personalize learning well.

References

- Alamri, H., Lowell, V., Watson, W., & Watson, S. L. (2020). Using personalized learning as an instructional approach to motivate learners in online higher education: Learner self-determination and intrinsic motivation. *Journal of Research on Technology in Education*, 52(3), 322–352. https://doi.org/10.1080/15391523.2020.1728449
- Alsobhi, A. Y., & Alyoubi, K. H. (2019). Adaptation algorithms for selecting personalised learning experience based on learning style and dyslexia type. *Data Technologies and Applications*, *53*(2), 189–200. https://doi.org/10.1108/DTA-10-2018-0092
- Alston, C. L., Danielson, K. A., Dutro, E., & Cartun, A. (2018). Does a discussion by any other name sound the same? Teaching discussion in three ELA methods courses. *Journal of Teacher Education*, 69(3), 225–238. https://doi.org/10.1177/0022487117715227
- Avallone, A. (2022). An educator's guide to learner profiles for students. *Next Generation Learning Challenges*. https://www.nextgenlearning.org/articles/getting-to-know-you-learner-profiles-for-personalization
- Bandura, A. (1977). Social learning theory. Prentice-Hall.
- Basham, J. D., Hall, T. E., Carter, R. A., & Stahl, W. M. (2016). An operationalized understanding of personalized learning. *Journal of Special Education Technology*, *31*(3), 126–136. https://doi.org/10.1177/0162643416660835
- Baye, A., Inns, A., Lake, C., & Slavin, R. E. (2019). A synthesis of quantitative research on reading programs for secondary students. *Reading Research Quarterly*, *54*(2), 133–166. https://doi.org/10.1002/rrq.229
- Becker, M. A. (2018). Second nature, critical theory, and Hegel's phenomenology. *International Journal of Philosophical Studies*, 26(4), 523–545.

- Bernacki, M. L., Greene, M. J., & Lobczowski, N. G. (2021). A systematic review of research on personalized learning: Personalized by whom, to what, how, and for what purpose(s)? *Educational Psychology Review*, 33(4), 1675–1715. https://doi.org/10.1007/s10648-021-09615-8
- Bernacki, M. L., & Walkington, C. (2018). The role of situational interest in personalized learning. *Journal of Educational Psychology*, 110(6), 864–881. https://doi:10.1037/edu0000250
- Bevan, M. T. (2014). A method of phenomenological interviewing. *Qualitative Health Research*, 24(1), 136–144.
- Bingham, A. J. (2017). Personalized learning in high technology charter schools. *Journal of Educational Change*, 18(4), 521–549. https://doi.org/10.1007/s10833-017-9305-0
- Bingham, A. J. (2019). A look at personalized learning: Lessons learned. *Kappa Delta Pi Record*, 55(3), 124–129. https://doi.org/10.1080/00228958.2019.1622383
- Bingham, A. J., Pane, J. F., Steiner, E. D, & Hamilton, L. S. (2016). Ahead of the curve: Implementation challenges in personalized learning school models. *Educational Policy*, 32(3), 454–489. https://doi.org/10.1177/0895904816637688
- Bishop, P. A., Downes, J. M., Netcoh, S., Farber, K., DeMink-Carthew, J., Brown, T., & Mark, R. (2020). Teacher roles in personalized learning environments. *The Elementary School Journal*, *121*(2), 311–336. https://doi.org/10.1086/711079
- Bloom, B. (1984). The search for methods of group instruction as effective as one-to-one tutoring. *Educational Researcher*, 41(8), 4–18. https://doi.10.3102/0013189X013006004
- Bogdan, R. C. & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theory and methods* (5th ed.). Allyn & Bacon.

- Brass, J., & Lynch, T. L. (2020). Personalized learning: A history of the present. *Journal of Curriculum Theorizing*, 35(2), 3-21.
- Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. *Qualitative Psychology*, 9(1), 3–26. https://doi.org/10.1037/qup0000196
- Brooks, C., Carroll, A., Gillies, R. M., & Hattie, J. (2019). A matrix of feedback for learning. *The Australian Journal of Teacher Education*, 44(4), 14-32.

 https://doi.org/10.14221/ajte.2018v44n4.2
- Brown, M., McCormack, M., Reeves, J., Brook, D. C., Grajek, S., & Alexander, B. (2020). *Educause horizon report: Teaching and learning edition*. EDUCAUSE.
- Brown, B., & Pederson, J. A. (2020). LinkedIn to classroom community: Assessing classroom community on the basis of social media usage. *Journal of further and Higher Education*, 44(3), 341–349. https://doi.org/10.1080/0309877X.2018.1541973
- Bruner, J. S. (1966). Toward a theory of instruction. Harvard University Press.
- Bruzina, R. (2004). Edmund Husserl and Eugen Fink: Beginnings and Ends in Phenomenology, 1928-1938. Yale University Press.
- Burkholder, C. & Thompson, J. (2020). Fieldnotes in qualitative education and social science research: Approaches, practices, and ethical considerations. Routledge.
- Bushko, K. (2018). How a station rotation partnership is driving student success. Blended

 Learning Universe. https://www.blendedlearning.org/how-a-rotation-partnership-is-driving-student-success/
- Campbell, R., Goodman-Williams, R., Feeney, H., & Fehler-Cabral, G. (2020). Assessing triangulation across methodologies, methods, and stakeholder groups: The joys, woes,

- and politics of interpreting convergent and divergent data. *American Journal of Evaluation*, 41(1), 125–144. https://doi.org/10.1177/1098214018804195
- Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, *39*(7), 3–7.
- Childress, S., & Benson, S. (2014). Personalized learning for every student every day. *The Phi Delta Kappan*, 95(8), 33–38. https://doi.org/10.1177/003172171409500808
- Clow, D. (2013). An overview of learning analytics. *Teaching in Higher Education*, 18(6), 683–695. https://doi:10.1080/13562517.2013.827653
- Cohen D, Crabtree B. (2006). Qualitative research guidelines project. http://www.qualres.org/HomeLinc-3684.html
- Colaizzi, P. F. (1978). Psychological research as the phenomenologist views it. In R. Valle & M. King (Eds.), *Existential phenomenological alternatives in psychology* (pp. 48—71). Oxford University Press.
- Corbin, J. & Strauss, A. (2008). Basics of qualitative research. Sage Publications.
- Costello, M. (2017). The benefits of active learning: Applying Bruner's discovery theory to the classroom: Teaching clinical decision-making to senior nursing students. *Teaching and Learning in Nursing*, *12*(3), 212–213. https://doi.org/10.1016/j.teln.2017.02.005
- Costigan, A. (2018). "I'm not teaching English, I'm teaching something else!": How new teachers create curriculum under mandates of educational reform. *Educational Studies (Ames)*, 54(2), 198–228. https://doi:10.1080/00131946.2017.1379809
- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.). Pearson.

- Creswell, J. W. & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). Sage Publications.
- Creswell, J. & Poth, C. (2018). Qualitative inquiry & research design: Choosing among five approaches (4th ed). Sage Publications.
- Creswell, J. W. & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, *39*(3), 124-131.

 https://people.ucsc.edu/~ktellez/Creswell_validity2000.pdf
- Crawford, K. (1996). Vygotskian approaches to human development in the information era. *Educational Studies in Mathematics*, *31*(1/2), 43–62. https://www.jstor.org/stable/3482934
- Cypress, B. S. (2019). Qualitative research: Challenges and dilemmas. *Dimensions of Critical Care Nursing*, 38(5), 264–270.
- Darling-Hammond, L. (2015). Can value added add value to teacher education? *Educational Researcher*, 44(2), 132–137. https://doi.org/10.3102/0013189X15575346
- de la Puente Pacheco, M. A., de Oro Aguado, C. M., & Lugo Arias, E. (2020). Understanding the effectiveness of the PBL method in different regional contexts: The case of Colombia.

 Interactive Learning Environments, 30(9), 1663–1676.

 https://doi.org/10.1080/10494820.2020.1740745
- Debs, L., Miller, K. D., Ashby, I., & Exter, M. (2019). Students' perspectives on different teaching methods: Comparing innovative and traditional courses in a technology program. *Research in Science & Technological Education*, *37*(3), 297–323. https://doi:10.1080/02635143.2018.1551199

- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*(4), 227–268. https://doi:10.1207/S15327965PLI1104_01
- DeMink-Carthew, J., & Netcoh, S. (2019). Mixed feelings about choice: Exploring variation in middle school student experiences with making choices in a personalized learning project. *Research in Middle Level Education Online*, 42(10), 1–20.
- DeMink-Carthew, J., & Olofson, M. W. (2020). Hands-joined learning as a framework for personalizing project-based learning in a middle grades classroom: An exploratory study.

 *RMLE Online: Research in Middle Level Education, 43(2), 1–17.

 https://doi.org/10.1080/19404476.2019.1693480
- Denzin, N. K., & Lincoln, Y. S. (2008). Strategies of qualitative inquiry (3rd ed.). Sage
- DeWalt, K. M, & Dewalt, B. R. (2011). *Participant observation: A guide for fieldworkers* (2nd ed.). AltaMira Press.
- Dewey, J. (1915). The school and society. Chicago Press.
- Dintersmith, T. (2019). What schools could be: Insights and inspiration from teachers across America. Edu21c Foundation.
- Dishon, G. (2017). New data, old tensions: Big data, personalized learning, and the challenges of progressive education. *Theory and Research in Education*, *15*(3), 272–289. https://doi.org/10.1177/1477878517735233
- Education Elements. (2017). 2016–2017 impact report: Building capacity for personalized learning and more.
 - https://www.edelements.com/hubfs/Downloads_(White_Papers,_Slides,_etc.)/Education2

- <u>0Elements20Impact20Report202016-17.pdf?hsCtaTracking=19670573-d960-44a0-906f-ee97238a9791%7Cbaa22678-6d16-4c9b-b870-e7e622f33f7c</u>
- Education Elements. (2020). The core four of personalized learning: The elements you need to succeed.

https://www.edelements.com/hubfs/Core_Four/Education_Elements_Core_Four_White_Paper.pdf

- Educause. (2018). NMC Horizon Report Preview: 2018 Higher Education Edition. NMC Horizon Project.
- Eiser, J. (1994). Attitudes, Chaos and the Connectionist Mind. Blackwell.
- Elstad, E., & Christophersen, K. (2017). Perceptions of digital competency among student teachers: Contributing to the development of student teachers' instructional self-efficacy in technology-rich classrooms. *Education Sciences*, 7(1), 27.

 https://doi.org/10.3390/educsci7010027
- Erbil, D. G. (2020). A review of flipped classroom and cooperative learning method within the context of Vygotsky theory. *Frontiers in Psychology*, *11*, 1157–1157. https://doi.org/10.3389/fpsyg.2020.01157

Every Student Succeeds Act, 20 U.S.C. §, 6301 (2015).

- Ferguson, R. (2012). Learning analytics: Drivers, developments and challenges. *International Journal of Technology Enhanced Learning*, 4(5/6), 304. https://doi:10.1504/IJTEL.2012.051816
- Ford, R. D. (2021). Adventures in gamification and personalized learning: A case study in game-based course design. *English Leadership Quarterly*, 43(3), 7–12.

- Fulton, R. (2021). Failing grades. *Inside Higher Education*.

 https://www.insidehighered.com/admissions/views/2021/03/08/more-high-school-students-are-failing-courses-creating-problems-colleges
- Garcia, A., Guggenheim, A., Stamatis, K., & Dalton, B. (2021). Glimmers of care: Attending to the affective everyday in ninth-grade literacy classrooms. *Reading Research Quarterly*, 56(2), 337–354. https://doi.org/10.1002/rrq.296
- Gašević, D., S. Dawson, and G. Siemens. (2015). Let's not forget: Learning analytics are about learning. *TechTrends*, 59(1): 64–71. https://doi:10.1007/s11528-014-0822-x
- Groff, J. (2017). Personalized learning: The state of the field & future directions. *Center for Curriculum Redesign*. https://www.media.mit.edu/publications/personalized-learning/
- Gross, B., Tuchman, S., & Patrick, S. (2018). *A national landscape scan of personalized*learning in K-12 Education in the United States. iNACOL, https://aurora-institute.org/wp-content/uploads/iNACOL_ANationalLandscapeScanOfPersonalizedLearning.pdf
- Gulikers, J.T.M., Bastiaens, T.J. & Kirschner, P.A. (2004). A five-dimensional framework for authentic assessment. *Educational Technology Research and Development*. *52*(67), 67–86. https://doi.org/10.1007/BF02504676
- Halverson, R., Barnicle, A., Hackett, S., Rawat, T., Rutledge, J., Kallio, J., Mould, C., & Mertes, J. (2015). Personalization in practice: Observations from the field (WCER Working Paper 2015-8). *University of Wisconsin–Madison, Wisconsin Center for Education**Research. http://www.wcer.wisc.edu/publications/workingPapers/papers.php
- Han, S., Capraro, R., & Capraro, M. M. (2014). How science, technology, engineering, and mathematics (STEM) project-based learning (PBL) affects high, middle, and low

- achievers differently: The impact of student factors on achievement. *International Journal of Science and Mathematics Education*. https://doi.org/10.1007/s10763-014-9526-0
- Hatch, J. A. (2002). *Doing qualitative research in education settings*. State University of New York Press.
- Hegel, G. W. F. (2007). *Philosophy of Mind*. Clarendon Press.
- Heidegger, M. (1962). Being and time. Harper & Row.
- Herold, B. (2017). The case (s) against personalized learning. *Education Week*, 37(12), 4–5.
- Hiemstra, D., Van Yperen, N., & Timmerman, M. E. (2019). Students' effort allocation to their perceived strengths and weaknesses: The moderating effect of instructional strategy.
 Learning and Instruction, 60, 180–190. https://doi:10.1016/j.learninstruc.2018.01.003
- Holloway, I. (1997). Basic concepts for qualitative research. Wiley-Blackwell.
- Horn, M. B. (2017). Now trending: Personalized learning: May a buzzword deliver on its promise? *Education Next*, *17*(4), 82–83.
- Husserl, E. (1970). *The crisis of European sciences and transcendental phenomenology*.

 Northwestern University Press.
- Husserl E. (2014). *Ideas for a pure phenomenology and phenomenological philosophy: General introduction to pure phenomenology*. Hackett Publishing.
- Ingkavara, T., Panjaburee, P., Srisawasdi, N., Sajjapanroj, S. (2022). The use of a personalized learning approach to implementing self-regulated online learning, *Computers and Education: Artificial Intelligence*, *3*(10086), 1–18, https://doi.org/10.1016/j.caeai.2022.100086

- Institute for Teaching and Leading. (2018). Spotlight school: School Two School District.

 https://static1.squarespace.com/static/58b6471486e6c03c662ce3a6/t/5d2d54c110560300

 <a href="https://static/s
- Johnson, L., Adams Becker, S., Cummins, M., Estrada, V., Freeman, A. & Hall, C. (2016). NMC horizon report: 2016 higher education edition. *The New Media Consortium*. https://www.learntechlib.org/p/171478/.
- Kallio, J. M. & Halverson, R. (2020). Distributed leadership for personalized learning, *Journal of Research on Technology in Education*, 52(3), 371–390. https://doi:10.1080/15391523.2020.1734508
- Kibler, A. K., Molloy Elreda, L., Hemmler, V. L., Arbeit, M. R., Beeson, R., & Johnson, H. E. (2019). Building linguistically integrated classroom communities: The role of teacher practices. *American Educational Research Journal*, *56*(3), 676–715. https://doi.org/10.3102/0002831218803872
- KnowledgeWorks. (2018). Personalized learning and the Every Student Succeeds Act.

 https://knowledgeworks.org/resources/personalized-learning-every-student-succeeds-act/
- Kunc, N. (1992). The need to belong: Rediscovering Maslow's hierarchy of needs. In R. A.Villa, J. S. Thousand, W. Stainback, & S. Stainback (Eds.). Restructuring for caring and effective education. Brookes.
- Kvale, S. & Brinkmann, S. (2015) *Interviews: Learning the craft of qualitative research interviewing* (3rd ed.). Sage Publications.
- Lee, D., Huh, Y., Chun-Yi, L., & Reigeluth, C. M. (2018). Technology functions for personalized learning in learner-centered schools. *Educational Technology, Research and Development*, 66(5), 1269–1302. https://doi.org/10.1007/s11423-018-9615-9

- Lee, D., Huh, Y., Lin, C., Reigeluth, C. M., & Lee, E. (2021). Differences in personalized learning practice and technology use in high- and low-performing learner-centered schools in the United States. *Educational Technology Research and Development*, 69(2), 1221–1245. https://doi.org/10.1007/s11423-021-09937-y
- LeGeros, L., Bishop, P., Netcoh, S., & Downes, J. (2022). Informing the implementation of personalized learning in the middle grades through a school-wide genius hour. *RMLE Online: Research in Middle Level Education*, 45(1), 1–

 22. https://doi.org/10.1080/19404476.2022.2009707
- Leong, L. C., Hassan, N., Isa, F. M., & Jalil, H. A. (2018). Mobile X-Space design, teaching strategies and undergraduate students' collaborative learning behaviour: A case study in Taylor's University, Malaysia. *Malaysian Journal of Learning and Instruction*, 15(2), 175–205.
- Li, K. C., & Wong, B. T. (2021). Features and trends of personalised learning: A review of journal publications from 2001 to 2018. *Interactive Learning Environments*, 29(2), 182–195. https://doi.org/10.1080/10494820.2020.1811735
- Li, K. C., & Wong, B. T. (2023). Artificial intelligence in personalised learning: A bibliometric analysis. *Interactive Technology and Smart Education*, 20(3), 422–445. https://doi.org/10.1108/ITSE-01-2023-0007
- Lin, T., Nagpal, M., VanDerHeide, J., Ha, S. Y., & Newell, G. (2020). Instructional patterns for the teaching and learning of argumentative writing in high school English language arts classrooms. *Reading & Writing*, *33*(10), 2549–2575. https://doi.org/10.1007/s11145-020-10056-y
- Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic inquiry*. Sage Publications.

- Lindsay Unified School District & Marzano, R. J. (2017). *Beyond reform: Systemic shifts toward personalized learning*. Marzano Research.
- Luettchau, K. (2021). Choice and reflection: How I've used personalized learning to engage students and provide equity during a pandemic. *English Leadership Quarterly*, 43(3), 2–6.
- Major, L., Francis, G. A., & Tsapali, M. (2021). The effectiveness of technology-supported personalised learning in low- and middle-income countries: A meta-analysis. *British Journal of Educational Technology*, (52)5, 1935–1964. https://doi.org/10.1111/bjet.13116
- Marshall, C., & Rossman, G. (2015). Designing qualitative research (6th ed.). Sage.
- McCarthy, E. M., Liu, Y., & Schauer, K. L. (2020). Strengths-based blended personalized learning: An impact study using virtual comparison group. *Journal of Research on Technology in Education*, 52(3), 353–370. https://doi:10.1080/15391523.2020.1716202
- McCarthy, K. S., Watanabe, M., Dai, J., & McNamara, D. S. (2020). Personalized learning in iSTART: Past modifications and future design. *Journal of Research on Technology in Education*, 52(3), 301–321. https://doi.org/10.1080/15391523.2020.1716201
- McHugh, D., Shaw, S., Moore, T. R., Ye, L. Z., Romero-Masters, P., & Halverson, R. (2020).

 Uncovering themes in personalized learning: Using natural language processing to analyze school interviews. *Journal of Research on Technology in Education*, 52(3), 391–402. https://doi.org/10.1080/15391523.2020.1752337
- Merleau-Ponty, M. (1956). What is phenomenology. *Cross Currents*, 6, 59—60.
- Merriam, S. B. (2009). Qualitative research: A guide to design and implementation. Jossey-Bass.

- Mese, C., & Dursun, O. O. (2019). Effectiveness of gamification elements in blended learning environments. *The Turkish Online Journal of Distance Education TOJDE*, 119–142. https://doi.org/10.17718/tojde.601914
- Mission, vision, & goals. (n.d.). *School Two School District*. https://www.mhsd.org/about-our district/mission-vision-goals
- Mitchell, C., Friedrich, L., & Appleget, C. (2018). Preservice teachers' blogging: Collaboration across universities for meaningful technology integration. *Teaching Education*, 1–17. https://doi.10.1080/10476210.2018.1486815
- Molin, L., & Lantz-Andersson, A. (2016). Significant structuring resources in the reading practices of a digital classroom. *Journal of Information Technology Education*, *15*, 131–156. https://doi.org/10.28945/3513
- Mötteli, C., Grob, U., Pauli, C., Reusser, K., & Stebler, R. (2021). Choice and voice from the students' point of view in schools with personalised learning environments.

 Unterrichtswissenschaft, 50, 287–308. https://doi.org/10.1007/s42010-021-00122-x
- Moustakas, C. E. (1994). Phenomenological research methods. Sage Publications.
- Murphy, M., Redding, S., & Twyman, J. S. (2016). *Handbook on personalized learning for states, districts, and schools*. Center on Innovations in Learning, Temple University.
- Nagle, J., & Taylor, D. (2017). Using a personal learning framework to transform middle grades teaching practice. *Middle Grades Research Journal*, 11(1), 85–100.
- Nandigam, D., Tirumala, S. S., & Baghaei, N. (2014). Personalized learning: Current status and potential. *In e-Learning, e-Management and e-Services (IC3e)*, 2014 IEEE Conference, pp. 111–116.

- National Center for Education Statistics. (2021). *Search for public schools*. https://nces.ed.gov/ccd/schoolsearch/index.asp
- National Forum on Education Statistics. (2019). Forum guide to personalized learning data (NFES2019160). U.S. Department of Education. National Center for Education Statistics.
- Netcoh, S., & Bishop, P. A. (2017). Personalized learning in the middle grades: A case study of one team's successes and challenges. *Middle Grades Research Journal*, 11(2), 33–48.
- New Media Consortium. (2016). *NMC horizon report: 2016*. Higher Education Edition. https://www.nmc.org/publication/nmc-horizon-report-2016-higher-education-edition/
- Newell, G. E., Bloome, D., & Hirvela, A. (2015). *Teaching and learning argumentative writing* in high school English language arts classrooms. Routledge.
- Newell, G. E., Bloome, D., Kim, M., & Goff, B. (2018). Shifting epistemologies during instructional conversations about "good" argumentative writing in a high school English language arts classroom. *Reading & Writing*, 32(6), 1359–1382.

 https://doi.org/10.1007/s11145-018-9905-y
- Nichols, T. P. (2020). Innovation from below: Infrastructure, design, and equity in literacy classroom makerspaces. *Research in the Teaching of English*, *55*(1), 56–81.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, *16*(1), 1–13. https://doi.org/10.1177/1609406917733847
- Ofosu-Ampong, K. (2020). The shift to gamification in education: A review on dominant issues.

 **Journal of Educational Technology Systems, 49(1), 113–37.*

 https://doi.10.1177/0047239520917629

- O'Loughlin, H. (2021). Teaching YA graphic novels: Personalizing the teaching of secondary reading with visual texts. *English Leadership Quarterly*, 43(3), 13–18.
- 1:World. (n.d.). School Two School District.

 https://www.schooltwo.org/departments/technology/1world
- Osterman, K. F. 2000. Students' need for belonging in the school community. *Review of Educational Research*, 70(3): 323–367. https://doi:10.3102/00346543070003323
- Pane, J. F., Steiner, E., Baird, M. & Hamilton, L. (2015). *Continued progress: promising evidence on personalized learning*. http://k12education.gatesfoundation.org/wp-content/uploads/2015/11/Gates-ContinuedProgress-Nov13.pdf
- Pane, J. F., Steiner, E. D., Baird, M. D., Hamilton, L. S., & Pane, J. D. (2017). *Informing progress: Insights on personalized learning implementation and effects*.

 https://www.rand.org/pubs/research_reports/RR2042.html
- Pardo, A., J. Jovanovic, S. Dawson, D. Gašević, and N. Mirriahi. (2019). Using learning analytics to scale the provision of personalised feedback. *British Journal of Educational Technology*, 50(1), 128–138. https://doi:10.1111/bjet.12592
- Parrado-Martínez, P., & Sánchez-Andújar, S. (2020). Development of competences in postgraduate studies of finance: A project-based learning (PBL) case study. *International Review of Economics Education*, 35, 100192. https://doi.org/10.1016/j.iree.2020.100192
- Parrish, C. W., Guffey, S. K., & Williams, D. S. (2021). The impact of team-based learning on students' perceptions of classroom community. *Active Learning in Higher Education*. 0(0). 1–15. https://doi.org/10.1177/14697874211035078

- Patall, E. A., Cooper, H., & Wynn, S. R. (2010). The effectiveness and relative importance of choice in the classroom. *Journal of Educational Psychology*, *102*(4), 896–915. https://doi:10.1037/a0019545
- Patrick, S., Worthen, M., Frost, D., & Gentz, S. (2016). *Promising state policies for personalized learning*. https://www.inacol.org/resource/promising-state-policies-for-personalized-learning/
- Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th edition). Sage Publishing, Inc.
- Paz-Albo, J. (2017). Is personalized learning the future of school? *Childhood Education*, 93(4), 295–299. https://doi.org/10.1080/00094056.2017.1343581
- Pea, R. (2014). The Learning Analytics Workgroup: A report on building the field of learning analytics for personalized learning at scale.

 https://ed.stanford.edu/sites/default/files/law_report_complete_09-02-2014.pdf
- Pennsylvania Department of Education. (2014). Academic standards for English Language Arts: Grades 6-12.
 - https://static.pdesas.org/content/documents/PA%20Core%20Standards%20ELA%206-12%20March%202014.pdf
- Peoples, K. (2021). *How to write a phenomenological dissertation: A step-by-step guide*. Sage Publications, Inc.
- Poland, S. M., Williams, D. L., Whigham, D. K., & Mullen, R. E. (1982). Effectiveness of supplemental instructional materials for students differing in farm experience. *NACTA Journal*, 26(4), 8–10. http://www.jstor.org/stable/43763894

- Popenici, S. A. D., & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. *Research and Practice in Technology Enhanced*Learning. 12(1). 22. https://doi.org/10.1186/s41039-017-0062-8
- Popham, W. J. (2007). The lowdown on learning progressions. *Educational Leadership*, 64(7), 83–84. http://www.ascd.org.ezproxy.liberty.edu/publications/educational-leadership.aspx
- Porath, S. & Hagerman, D. (2021) Becoming connected learners through personalized learning, *Middle School Journal*, 52(2), 26–37. https://doi.org/10.1080/00940771.2020.1868058
- Prain, V., Blake, D., Deed, C., Edwards, M., Emery, S., Farrelly, C., Fingland, D., Henriksen, J., Lovejoy, V., Meyers, N., Mooney, A., Muir, T., Sbaglia, R., Swabey, K., Thomas, D., Tytler, R., & Zitzlaff, T. (2018). A framework to support personalising prescribed school curricula. *British Educational Research Journal*, *44*(6), 1101–1119. https://doi.org/10.1002/berj.3481
- "Program of Studies." (n.d.). School One School District.

 https://resources.finalsite.net/images/v1646879988/schoolonek12paus/mq6o87ou3c626h

 hlw98g/2223_ProgramofStudies.pdf
- "Program of Studies." (n.d.). School Three School District.

 https://resources.finalsite.net/v164683r239874/schoolthreek12paus/gldoahtda5lztokdbx5
 6/22_23S3MSProgramofStudiesdocx.pdf
- Rahman, R., Ahmad, S., & Hashim, U. R. (2018). The effectiveness of gamification technique for higher education students engagement in polytechnic Muadzam Shah Pahang,

 Malaysia. *International Journal of Educational Technology in Higher Education*, 15(1),

 1–16. https://doi.org/10.1186/s41239-018-0123-0
- RAND Corporation. (2014). Early progress: Interim research on personalized learning. Bill &

- Melinda Gates Foundation.
- http://k12education.gatesfoundation.org/download/?Nump2802&filenamep42-Early-Progress-on-Personalized-Learning-Full-Report.pdf
- Roberts-Mahoney, H., Means, A. J., & Garrison, M. J. (2016). Netflixing human capital development: Personalized learning technology and the corporatization of K-12 education. *Journal of Education Policy*, *31*(4), 405–420. https://doi.org/10.1080/02680939.2015.1132774
- Rogers, R. (2018). Coding and writing analytic memos on qualitative data: A review of Johnny Saldaña's the coding manual for qualitative researchers. *Qualitative Report*, 23(4), 889–892. https://doi.org/10.46743/2160-3715/2018.3459
- Rovai, A. P. 2002. "Sense of Community, Perceived Cognitive Learning, and Persistence in Asynchronous Learning Networks." *The Internet and Higher Education*, *5*(4). 319–332. https://doi:10.1016/s1096-7516(02)00130-6
- Rubin, H. J. & Rubin, I. S. (2012) *Qualitative interviewing: The art of hearing data* (3rd ed.). Sage Publications.
- Rutledge, S. A., Cohen-Vogel, L., & Roberts, R. L. (2015). Understanding effective high schools evidence for personalization for academic and social emotional learning. *American Educational Research Journal*, 52(6), 1060–1092.
- Ryan, A. M., & Patrick, H. (2001). The classroom social environment and changes in adolescents' motivation and engagement during middle school. *American Educational Research Journal*, 38(2), 437–460. https://doi:10.3102/00028312038002437
- Saldaña, J. (2012). The coding manual for qualitative researcher. Sage Publication.

- Sarkar Arani, M. R., Lander, B., Shibata, Y., Kim-Eng Lee, C., Kuno, H., & Lau, A. (2019).

 From "chalk and talk" to "guide on the side": A cross-cultural analysis of pedagogy that drives customised teaching for personalised learning. *European Journal of Education*, 54(2), 233–249. https://doi.org/10.1111/ejed.12340
- Schieble, M., Vetter, A., & Martin, K. M. (2020). Classroom talk for social change: Critical conversations in English language arts. Teachers College Press.
- Schmid, R., Pauli, C., Stebler, R., Reusser, K., & Petko, D. (2022). Implementation of technology-supported personalized learning-its impact on instructional quality. *The Journal of Educational Research (Washington, D.C.)*, 115(3), 187–198. https://doi.org/10.1080/00220671.2022.2089086
- Schmid, R., & Petko, D. (2019). Does the use of educational technology in personalized learning environments correlate with self-reported digital skills and beliefs of secondary-school students? *Computers & Education*, *136*, 75–86.

 https://doi:10.1016/j.compedu.2019.03.006
- "School Three Overview." (n.d.). U.S. News.

 https://www.usnews.com/education/k12/pennsylvania/school-three-259764#students-teachers
- Schwahn, C., & McGarvey, B. (2012). *Inevitable: Mass customized learning: Learning in the age of empowerment*. CreateSpace Independent Publishing Platform.
- Shankland, R., & Rosset, E. (2017). Review of brief school-based positive psychological interventions: A taster for teachers and educators. *Educational Psychology Review*, 29(2), 363–392. https://doi:10.1007/s10648-016-9357-3

- Shaw, D., & Satalkar, P. (2018). Researchers' interpretations of research integrity: A qualitative study. *Accountability in Research*, 25(2), 79–93.

 https://doi.org/10.1080/08989621.2017.1413940
- Shelton, S. A., Guy, K. H., & Jones, A. M. (2020). "These kids are rebelling": A student-led transformation of community and critical literacy. *English Teaching: Practice and Critique*, *19*(1), 65–78. https://doi.org/10.1108/ETPC-05-2019-0072
- Shemshack, A., Kinshuk, & Spector, J. M. (2021). A comprehensive analysis of personalized learning components. *Journal of Computers in Education (the Official Journal of the Global Chinese Society for Computers in Education)*, 8(4), 485–503. https://doi.org/10.1007/s40692-021-00188-7
- Shemshack, A., & Spector, J. M. (2020). A systematic literature review of personalized learning terms. *Smart Learning Environments*, 7(1), 1–20. https://doi.org/10.1186/s40561-020-00140-9
- Siemens, G. (2013). Learning analytics: The emergence of a discipline. *American Behavioral Scientist*, 57(10), 1380–1400. https://doi:10.1177/0002764213498851
- Singer, J., Marx, R. W., Krajcik, J., & Chambers, J. C. (2000). Constructing extended inquiry projects: Curriculum materials for science education reform. *Educational Psychologist*, 35(3), 165–178. https://doi:10.1207/S15326985EP3503_3
- Skinner B. F. (1958). Teaching machines. Science, 128, 969–977.
- Speer, N. K., Reynolds, J. R., Swallow, K. M., & Zacks, J. M. (2009). Reading stories activates neural representations of visual and motor experiences. *Psychological Science*, 20(8), 989–999. https://doi:10.1111/j.1467-9280.2009.02397.x

- Sperling, M., & Woodlief, L. (1997). Two classrooms, two writing communities: Urban and suburban tenth-graders learning to write. *Research in the Teaching of English*, 31(2), 205–239. http://www.jstor.org/stable/40171273
- Stake, R. E. (1995). The art of case study research. Sage Publications.
- Stake, R. E. (2005). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 443–466). Sage Publications.
- Starman, A. B. (2013). The case study as a type of qualitative research. *Journal of Contemporary Educational Studies*, 1. 28–43.
- "Strategic Direction." (n.d.). School One School District.

 https://drive.google.com/file/d/1HyyXE_I15CCpdMb-SStYbuCVG1UwxBmR/view
- "Strategic Direction" (n.d.). School Three School District.
 - https://drive.google.com/file/d/1HhyyXE_chRkndfoS YbuCVG1UwxBmR/view
- Strekalova-Hughes, E., Nash, K. T., Schmer, B., & Caldwell, K. (2021). Meeting the needs of all cultureless learners: Culture discourse and quality assumptions in personalized learning research. *Review of Research in Education*, 45(1), 372–407.

 https://doi.org/10.3102/0091732X20985081
- Thiessen, J. (2016). Web 2.0 and social media connecting learners in self-paced study:

 Practitioners' perspectives | le web 2.0 et les médias sociaux reliant les apprenants dans
 l'étude à leur rythme: Points de vue de praticiens. *Canadian Journal of Learning and*Technology, 42(2). https://doi.org/10.21432/T2R890
- Tomlinson, C. A. (2017). Let's celebrate personalization: But not too fast. *Educational Leadership*, 74(6), 10.

- "Total Experience Learning." (n.d.). Albright College. https://www.albright.edu/academic/total-experience-learning/
- Tsai, Y., Perrotta, C., & Gašević, D. (2020). Empowering learners with personalised learning approaches? Agency, equity and transparency in the context of learning analytics.

 Assessment and Evaluation in Higher Education, 45(4), 554–567.

 https://doi.org/10.1080/02602938.2019.1676396
- Tucker, C. (2020). Balance with blended learning: Partner with your students to reimagine learning and reclaim your life. Corwin Teaching Essentials.
- Turvey, K., & Hayler, M. (2017). Collaboration and personalisation in teacher education; The case of blogging. *Teaching and Teacher Education*, 68, 42–52.
 https://doi.10.1016/j.tate.2017.08.003
- "2022-2023 Student Handbook." (n.d.). School Three High School. https://coredocs.s3.amazonaws.com/documents/asset/uploaded/2941/cwhs/2425693/2022-23_Student_Handbook.pdf
- Twombly, S. (2014). When teaching interferes with learning: Balancing accountability with the unique needs of every child. *The New Educator*, 10(1), 44–52. https://doi.org/10.1080/1547688X.2014.868232
- Tzuo, P. W. (2007). The tension between teacher control and children's freedom in a child-centered classroom: Resolving the practical dilemma through a closer look at the related theories. *Early Childhood Education Journal*, *35*(1), 33–39.

 https://doi.org/10.1007/s10643-007-0166-7
- U.S. Department of Education. (2015). *Race to the top district program*. https://www2.ed.gov/programs/racetothetop-district/index.html

U.S. Department of Education (2017). Reimagining the role of technology in education: 2017

National Education Technology Plan update.

https://tech.ed.gov/files/2017/01/NETP17.pdf

U.S. Department of Education, Office of Educational Technology. (2016). Future ready learning: Reimagining the role of technology in education.

https://tech.ed.gov/files/2015/12/NETP16.pdf

U.S. News and World Report. (2021). *Best Pennsylvania high schools*.

https://www.usnews.com/education/best-high-schools/pennsylvania/rankings

van de Pol, J., Volman, M., Oort, F., & Beishuizen, J. (2014). Teacher scaffolding in small-group work: An intervention study. *Journal of the Learning Sciences*, 23(4), 600–650. https://doi.10.1080/10508406.2013.805300

- Van Manen, M. (1997). Researching lived experience: Human science for an action sensitive pedagogy. State University of New York Press.
- van Manen, M. (2017). But is it phenomenology? *Qualitative Health Research*, 27(6), 775–779. https://doi.org/10.1177/1049732317699570
- Verdinelli, S., & Scagnoli, N. I. (2013). Data display in qualitative research. *International Journal of Qualitative Methods*, 12(1), 359–381.

 https://doi.org/10.1177/160940691301200117
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*.

 Harvard University Press.
- Walkington, C., & Bernacki, M. L. (2019). Personalizing algebra to students' individual interests in an intelligent tutoring system: Moderators of impact. *International Journal of Artificial Intelligence in Education*, 29(1), 58–88. https://doi.org/10.1007/s40593-018-0168-1

- Walkington, C., & Bernacki, M. L. (2020). Appraising research on personalized learning:
 Definitions, theoretical alignment, advancements, and future directions. *Journal of Research on Technology in Education*, 52(3), 235–252.
 https://doi.org/10.1080/15391523.2020.1747757
- Walkington, C. & Bernacki, M.L. (2021). Personalizing classroom learning. [Policy Brief].
 University of Nevada Las Vegas. American Psychological Association, Division 15.
 https://apadiv15.org/makingclassroom-learning-personalized/.
- Walkington, C., & Hayata, C. (2017). Designing learning personalized to students' interests:

 Balancing rich experiences with mathematical goals. *ZDM Mathematics Education*,

 49(4), 519–530. https://doi:10.1007/s11858-017-0842-z
- Wang, D., Jeng, Y., Chiang, C., & Huang, Y. (2022). Exploring the cohesion of classroom community from the perspectives of social presence and social capital. *Journal of Computing in Higher Education*, 34(1), 39–59. https://doi.org/10.1007/s12528-021-09277-z
- Watson, W. R., & Watson, S. L. (2017). Principles for personalized instruction. In C. M. Reigeluth, B. J. Beatty, & R. D. Myers (Eds.), *Instructional-design theories and models, volume IV: The learner-centered paradigm of education*. (pp. 93–120). Routledge.
- Whiting, K. (2020). These are the top 10 job skills of tomorrow and how long it takes to learn them. *World Economic Forum*. https://www.weforum.org/agenda/2020/10/top-10-work-skills-of-tomorrow-how-long-it-takes-to-learn-them/
- Wongwatkit, C., Srisawasdi, N., Hwang, G. J., & Panjaburee, P. (2017). Influence of an integrated learning diagnosis and formative assessment-based personalized web learning

- approach on students' learning performances and perceptions. *Interactive Learning Environments*, 25(7), 889–903. https://doi:10.1080/10494820.2016.1224255
- Wright, M. C., Bergom, I., & Bartholomew, T. (2019). Decreased class size, increased active learning? intended and enacted teaching strategies in smaller classes. *Active Learning in Higher Education*, 20(1), 51–62. https://doi.org/10.1177/1469787417735607
- Wu, W., Hsiao, H., Wu, P., Lin, C., & Huang, S. (2012). Investigating the learning-theory foundations of game-based learning: A meta-analysis. *Journal of Computer Assisted Learning*, 28(3), 265–279. https://doi.org/10.1111/j.1365-2729.2011.00437.x
- Yesudas, M., Menon, G., & Ramamurthy, V. (2014). Intelligent operational dashboards for smarter commerce using big data. *IBM Journal of Research and Development*, 58(5/6), 13–11. https://doi:10.1147/JRD.2014.2346131
- Yin, R. K. (2016). Qualitative research from start to finish (2nd ed.). The Guilford Press.
- Zhang, L., Basham, J. D., & Yang, S. (2020). Understanding the implementation of personalized learning: A research synthesis. *Educational Research Review*, *31*, 100339. https://doi.org/10.1016/j.edurev.2020.100339
- Zhang, L., Yang, S., & Carter, R. A. (2020). Personalized learning and ESSA: What we know and where we go. *Journal of Research on Technology in Education*, 52(3), 253–274. https://doi.org/10.1080/15391523.2020.1728448
- Zimmerman, G., & Kuhlmann, J. (2019). Personalized, competency-based learning: Analysis and reflections on student outcome data in RSU2. *KnowledgeWorks*.

 https://knowledgeworks.org/resources/analysis-reflection-student-outcome-data-rand/

Appendix A: IRB Approval Letter

LIBERTY UNIVERSITY. INSTITUTIONAL REVIEW BOARD

May 26, 2023

Re: IRB Exemption - IRB-FY22-23-1187 A Phenomenological Study of Teacher Experiences Personalizing Learning in English Language Arts

Dear Kristen Soper, Sabine Branch,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, PhD, CIP

Administrative Chair

Research Ethics Office

Appendix B: Setting Permission

February 1, 2023

Name Superintendent District Address

Dear [Recipient],

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctorate degree. The title of my research project is *A Phenomenological Study of Teacher Experiences Personalizing Learning in English Language Arts*, and the purpose of my research is to understand the experience of personalizing learning and maintaining social interaction for high school English language arts teachers in Southeastern Pennsylvania.

I am writing to request your permission to conduct my research at [school district/school name].

Participants will be asked to contact me to schedule an interview and observation, and to submit documents such as lesson plans and curriculum information for data collection. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time. Pseudonyms for the district and participants' names will be used to protect confidentiality.

Thank you for considering my request. If you choose to grant permission, please provide a signed statement on official letterhead indicating your approval. A permission letter document is attached for your convenience.

Sincerely,

Kristen Soper Doctoral Candidate Liberty University

Appendix C: Permission Response Template

reducity 1, 2025
Dear Kristen Soper:
After careful review of your research proposal entitled <i>A Phenomenological Study of Teacher Experiences Personalizing Learning in English Language Arts</i> , I have decided to grant you permission to contact our faculty/staff/other and invite them to participate in your study.
Check the following boxes, as applicable:
$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
☐ I am requesting a copy of the results upon study completion and/or publication.
Sincerely,
[Official's Name] [Official's Title] [Official's Company/Organization]

Appendix D: Recruitment Letter

February 1, 2023

Dear [Recipient]:

As a student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The title of my research project is *A Phenomenological Study of Teacher Experiences Personalizing Learning in English Language Arts*, and the purpose of my research is to understand the experience of personalizing learning and maintaining social interaction for high school English language arts teachers in Southeastern Pennsylvania. I am writing to invite eligible participants to join my study.

Participants must be secondary English language arts teachers working to provide personalized learning experiences for students. Participants, if willing, will be asked to participate in an interview (30-45 minutes), allow the researcher to observe a class (40-90 minutes), and submit at least two documents related to personalized learning, such as lesson plans, curricula, syllabi, or learning management system information. Names and other identifying information will be requested for this study, but the information will remain confidential.

To participate, please click on the link to provide information about yourself and reply to this email indicating your availability for an interview and observation.

A consent document is <u>linked here</u> in this email. The consent document contains additional information about my research. After you have read the consent form, please click <u>the link</u> to proceed to the survey. Doing so will indicate that you have read the consent information and would like to participate in the study.

Participants will each receive a \$40 Visa gift card to compensate for their time at the conclusion of the data collection process.

Sincerely,

Kristen Soper Doctoral Candidate School of Education Liberty University

Appendix E: Consent Form

A Phenomenological Study of Teacher Experiences Personalizing Learning in English Language
Arts

Kristen Soper Doctoral Candidate School of Education Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be a secondary English language arts teacher working to personalize learning for your students. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of this transcendental phenomenological study is to understand the lived experiences of high school English language arts teachers implementing personalized learning in Southeastern Pennsylvania. Personalizing learning individualizes the learning process for students, but English language arts courses include social interaction such as discussion as essential content. The aim of this study is to understand how English teachers personalize learning while retaining social interaction, and what that experience is like so that other teachers may learn from the process.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:

- 1. Participate in an audio-recorded interview that will take no more than one hour.
- 2. Teach a lesson in your classroom and allow the researcher to observe and video record the lesson for no more than one class period.
- 3. Submit at least two documents which demonstrate aspects of personalized learning to the researcher such as a lesson plan, curriculum, syllabus, gradebook system, etc.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include an improved understanding of what ELA teachers experience as they attempt to personalize learning for students in their care.

What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be kept confidential by replacing names with pseudonyms.
- Interviews will be conducted in a location where others will not easily overhear the conversation.
- Data will be stored on a password-locked computer and paper copies will be stored in a locked drawer. After three years, all electronic records will be deleted, and all hardcopy records will be shredded.
- Documents will be stored on a password-locked computer and paper copies will be stored in a locked drawer. After three years, all electronic records will be deleted, and all hardcopy records will be shredded.
- Recordings will be stored on a password locked computer for three years and then
 deleted. The researcher and members of her doctoral committee will have access to these
 recordings.

How will you be compensated for being part of the study?

Participants will be compensated for participating in this study. At the conclusion of the interview and observation participants will receive a \$40 Visa gift card.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University or your school district. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Kristen Soper. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her or you may also contact the researcher's faculty sponsor, Sabine Branch.

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA, 24515; our phone number is 434-592-5530, and our email address is IRB@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

By clicking on this hyperlink, you agree to be in this study. Make sure you understand what the study is about before you proceed. You may make a copy of this document for your records and the researcher will keep a copy of the study records. If you have any questions about the study after you agree to participate, you may contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

Click here to consent to participate in this study and provide your demographic information.

Appendix F: Consent Form and Demographic Survey

Consent Form

This form provides formal consent and demographic information for the research study, A Phenomenological Study of Teacher Experiences Personalizing Learning in English Language Arts by Kristen Soper through Liberty University. The consent information is <u>linked here</u>.

1.	What is your name?
2.	After reading the consent materials (<u>linked again here</u>), I consent to participate in this study. I understand that my participation in this study is voluntary, and that I am free to not answer any question and/or withdraw at any time.
	Mark only one oval.
	yes
	_ 20
3.	The researcher has my permission to audio-record and video-record me as part of my participation in this study.
	Mark only one oval.
	yes
	_ 20
	Demographic Information
	lease complete the following
- 4	

4	What is your highest degree level?
-	Mark only one oval.
	Bachelor's Degree Master's Degree
	Post-Graduate
	Doctorate
5.	What are your teaching certifications?
6.	How long have you been a teacher?
	Mark only one oval.
	0-5 years
	6-10 years
	11-15 years
	16-20 years
	21-25 years
	26 or more years
7.	How long have you taught English language arts?
	Mark only one oval.
	0-5 years
	6-10 years
	11-15 years
	16-20 years
	21-25 years
	26 or more years
	low long have you worked to personalize learning in your classroom by differentiating content, ctivities, assessments, or resources for each of your students?
	fark only one oval.
,	
	0-5 years 6-10 years
	11-15 years
	16-20 years
	21-25 years
	26 or more years

This content is neither created nor endorsed by Google.

Appendix G: Interview Protocol

Part I: Notes for the Interviewer

- 1. Tape-record the interviews if permission is granted
- 2. If permission is not granted, take notes about answers to questions
- 3. Interview in a neutral setting
- 4. Each interview lasts 45-60 minutes
- 5. Begin each interview entry with the following:

a.	Designation of Interviewee
b.	Location of Interview
c.	Date:
d.	Start Time:
e.	End Time:

Part II: Steps of the Interview

- 1. Introduction
 - a. Review confidentiality and consent form
 - b. Create a relaxed environment through dialogue
- 2. Explain the purpose of the interview
- 3. Ask permission to record the interview
- 4. Ask the predetermined set of 15–20 interview questions in the same way and in the same order for all participants, with allowances to ask additional follow up questions as necessary for clarity and understanding
- 5. Thank the participant for their time and provide contact information to them in case they have follow up questions or comments about the process

Part III: Interview Questions

- 1. How has your school year been going this year? Ice Breaker
- 2. How do you define personalized learning? CRQ
- 3. Describe your process of personalizing learning for your students. CRQ
- 4. What are your experiences of using personalized learning as a framework for education?

CRQ

- 5. How is your role as a teacher different in a personalized learning framework than a traditional framework? CRQ
- 6. Explain the choices you make when personalizing learning for your students. CRQ
- 7. Describe the challenges to personalizing learning you have experienced. SQ3
- Describe the situations when personalized learning went well in your classroom. CRQ,
 SQ1
- 9. Describe the experience of using instructional strategies to personalize learning. SQ1
- 10. How do you gauge the effectiveness of instructional strategies for personalized learning?
 SQ1
- 11. What professional development or other resources help you to personalize learning? SQ1
- 12. Describe the experience of incorporating meaningful interaction to the personalized learning framework in your classroom. SQ2
- 13. How do your interactions with students affect their learning? SQ2
- 14. How do you foster relationships between students in a personalized learning framework?
 SQ2
- 15. What challenges do you face when considering incorporating interactions in your classroom? SQ2, SQ3
- 16. What else would you like to add to our discussion of your experiences with personalized learning that we haven't discussed?

Appendix H: Observation Protocol

Protocol for the Observation of the Teaching of Personalized Learning in ELA.

Designation of participant being observed	
Location of Interview	
Date:	
Start Time:	
End Time:	
Grade being observed:	
Name of course being observed:	
Fieldnotes	

Area of	Activity Observed	Teacher	Students	Context/Other
Observation	richtity Coscived	reaction	Students	Context other
Start of the class	☐ Teacher lecture			
Start of the Class	☐ Student-teacher			
	interaction			
	☐ Student-student			
	collaboration			
	□ Competence			
	building activity			
	☐ Assessment activity			
Personalized	☐ Teacher lecture			
strategies at the	☐ Student-teacher			
beginning of	interaction			
class	☐ Student-student			
Class	collaboration			
	Competence building activity			
	☐ Assessment activity			
Personalized				
strategies				
throughout class	☐ Student-teacher			
unoughout class	interaction			
	☐ Student-student			
	collaboration			
	☐ Competence			
	building activity			
G : 1: .:	☐ Assessment activity			
Socialization	☐ Teacher lecture			
strategies	☐ Student-teacher			
throughout class	interaction			
	☐ Student-student			
	collaboration			

	□ Competence		
	building activity		
	☐ Assessment activity		
Personalization	☐ Teacher lecture		
at the end of	☐ Student-teacher		
class	interaction		
	☐ Student-student		
	collaboration		
	□ Competence		
	building activity		
	☐ Assessment activity		
Challenges to	☐ Teacher lecture		
personalization	☐ Student-teacher		
	interaction		
	☐ Student-student		
	collaboration		
	□ Competence		
	building activity		
	☐ Assessment activity		
End of class	☐ Teacher lecture		
	☐ Student-teacher		
	interaction		
	☐ Student-student		
	collaboration		
	□ Competence		
	building activity		
	☐ Assessment activity		
Other			
observations			

Observation Interpretations and Reflections on Fieldnotes

Part I: Environment

Reflections	Interpretations
	Teacher is:
	Students are:
	Describe the learning environment.

Part II: Personalized learning

Reflections	Interpretations
	Describe the secondary ELA teacher's experiences implementing personalized
	learning in the beginning of the class. (CRQ)
	Describe the secondary ELA teacher's experiences implementing personalized learning throughout the class. (CRQ)
	Describe the secondary ELA teacher's experiences implementing personalized learning at the conclusion of the class. (CRQ)
	Describe the secondary ELA teacher's experiences as they use strategies to personalize learning. (SQ1)
	Describe the challenges to personalizing learning in the room. (SQ3)

Part III: Social interactions

Reflections	Interpretations
	Describe the social interaction in the classroom. (SQ2)

Part IV: Miscellaneous observations

Reflections	Interpretations
	Describe any other miscellaneous observations.

Appendix I: Document Analysis Protocol

Protocol for Do	cument Analysis of Personalized Learning in ELA.
Document Orig	in
	ent
Date created:	
Dute 10gged	
Part I: Context	
·	
Reflections	Initial Comments
	Describe the context in which this document is utilized.
Part II: Persona	lized learning
Reflections	Initial Comments
	Describe the ways this document reflects the secondary ELA teacher's
	experiences implementing personalized learning. (CRQ)
	Describe the ways this document outlines the experiences of the secondary ELA teacher's use of strategies to personalize learning. (SQ1)
	Describe any challenges to personalizing learning apparent from the document. (SQ3)
Part III: Social i	interactions
Reflections	Initial Comments
Reflections	Describe the ways the document outlines systems for social interaction in the classroom. (SQ2)
Part IV: Miscel	laneous observations
Γ	
Reflections	Initial Comments
	Describe any other miscellaneous observations from the document.

Appendix J: Thematic Table

Theme	Sub-Theme	Evident in			Codes
Student	Choices	Int.	Obs.	Doc.	Engagement, choices, tech tools, guide choice, alignment of choices
Engagement	Authenticity	X	X	X	Authenticity, engagement, PBL, hands on
	Self-Efficacy	X	X	X	Self-efficacy, positive feedback, confidence, student success
Time and	Getting to	X			Get to know students, surveys, more time,
resources	know students				class size
	Personalizing content	X	X		Personalize content, student resources, range of tools, Lexile, PD, more time, class size
	Personalizing feedback	X	X		Personalize feedback, peer feedback, range of tools, flexible response, PD, positive feedback, more time, class size
Positive	Caring for	X	X		Positive relationships, comfortable in the
relationships	students				classroom, check ins, student well-being
	Understanding students	X	X	X	Get to know students, comfortable in the classroom, student groupings, positive relationships
	Supporting students	X	X	X	Positive relationships, comfortable in the classroom, mutual respect, class size, positive interactions, peer interactions
Multitasking and Balancing	Multitasking content and students	X	X	X	Multitasking, student behavior, student needs
	Balancing autonomy and guidance	X	X	X	Balance autonomy and guidance, flexible approaches, data-informed decisions, range of tools, self-regulation
	Balancing what students know and need to know	X	X		Standards/objectives, modifications and accommodations, meet students where they are, backwards design, universal design, data, PD