A QUALITATIVE STUDY OF TEACHERS AS PATH-GOAL LEADERS WITH AN EMPHASIS ON CLEARING THE PATH OF DISTRACTION

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By

KEELY HARRIS SCOTT

Dr. Cynthia MacGregor, Dissertation Supervisor

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The undersigned, appointed by the dean of the Graduate School, have examined the Dissertation entitled

A QUALITATIVE STUDY OF TEACHERS AS PATH-GOAL LEADERS WITH AN EMPHASIS ON CLEARING THE PATH OF DISTRACTION

Presented by Keely Harris Scott

a candidate for the degree of Doctorate of Educational Leadership and Policy Analysis, and hereby certify that, in their opinion, it is worthy of acceptance.

Dr. Cynthia MacGregor, Chair

Dr. Jason Anderson

Dr. James Sottile

Dr. Marissa Weaver

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ABSTRACT

This qualitative phenomenological study investigated teachers as leaders in their classrooms. The study focused on the various ways high school teachers facilitate deep work in their students to lead them to learning goals, by examining how teachers define goals, clarify paths, remove obstacles, and provide support to learning. The study acknowledges the current problem of students needing help to overcome learning obstacles such as distraction. The setting of the study was a single high school in the Midwest. Findings from interviews of teachers, principals, and students include a consensus on the importance of controlling the context of the learning environment by clarifying task relevancy and monitoring focus intensity. Findings also showed the importance of the dynamic interplay between teacher and students; continual feedback is necessary to meet student needs. Preferred feedback is verbal, and data showed strong agreement in student engagement in a positive student/teacher relationship as the most effective way to learn and avoid distractions. The implications for practice apply to both teachers and instructive decision-makers in terms of planning and expectations of class organization, management, and content delivery. Future research is needed in how the brain science of cognitive load theory can inform classroom practices.

SECTION ONE: INTRODUCTION TO THE DISSERTATION

A Qualitative Study of Teachers as Path-Goal Leaders With an Emphasis on Clearing the Path of Distraction

Imagine a 21st century teacher sitting in a cramped classroom that was built in the mid 20th century. The teacher looks at the tiny desks arranged in rows, sighs at the intercom speaker that alerted her parents' generation, and tries to focus on the task at hand: prepare lessons that inspire students to be savvy citizens in the world outside these cinder block walls. This teacher draws inspiration from literature written in a time even before her tiled floors-- "Only connect!" says E.M. Forster in his 1910 novel *Howard's End*, "Live in fragments no longer."

See From the Balcony and Create the Map

Motivated by the directive to *only connect*, teachers must use their broad and studied perspectives to inform their instructional organization for students who are novices. For a teacher to make a map for student success, they must see the lay of the land first. To draw from another metaphor that illustrates adaptive leadership behavior, teachers must get on the balcony and find perspective despite the wild activity below (Northouse, 2019). Then like a cartographer gathering data and clarifying terrain, the teacher charts a path to learning. This initial map-making is time-intensive and requires deft planning. Classroom teachers cannot alter certain aspects of their environments; many factors are a matter of fact: physical spaces in which students gather, class duration, and the bell schedule. Teachers cannot simply change the structure of their day. Therefore, teachers must boldly adapt to the context in which they teach. As Drysdale and Gurr (2017) argued for principals to "master the context" (p. 139), so too must teachers take steps to control what they can to facilitate learning for students. Thus,

teachers should assess the landscape of their classroom, factoring in what they cannot change as well as what variables they can control when designing instruction. A well-crafted map to success can offer students the perspective they do not have: Showing students the end goal and the many paths to achieve it will help them feel less adrift and helpless. To once more offer a Forster axiom, "Spoon feeding in the long run teaches us nothing but the shape of the spoon." Indeed, a myopic view of the steps along the learning path could obscure the larger picture. If the teacher as cartographer can offer the complete map, students could connect meaning to clearly defined destinations. If they know the *where* and the *why*, students might make the trek all the way to authentic learning.

Read the Map: Teacher as Pathfinder

No matter how complete the map, however, unless the teacher steps down from the balcony and guides on the ground, students will still feel adrift. Thus, the implementation of broader maps to success requires personal connection and guidance from teachers as path-goal leaders, leaders who "meet followers' motivational needs" in a particular setting (Northouse, 2019, p. 117). Meeting student needs is a challenge, but current research insists that educators cannot lead students to educational goals by using a single method (McBride, 2004; Subban, 2006; Tomlinson, 2000). Instead, teachers must use various approaches, or differentiated learning (Gumpert & McConell, 2019; Tomlinson & Dockterman, 2002; Wormeli, 2017). Research also suggests that increased personalization in education encourages better academic outcomes (Goodwin, 2017; McClure et al., 2010). Facilitating these multiple approaches and essential personal connections comes from teachers as path-goal leaders in their classrooms.

Once the map is made, the instructional work truly begins. Facilitation, or reading the map, will require the multi-faceted behaviors of a path-goal leader. A teacher as a path-goal leader seeks to complement their classroom environment by assisting their students, just as House (1996) delineated for leaders, by providing the necessary cognitive clarifications to ensure followers can meet goals and feel intrinsic well-being. There are many ways teachers clear this cognitive path to learning, and understanding those many methods as aligned by the path-goal theory will assist in seeing a complete picture of the myriad responsibilities of a teacher. Additionally, a full picture of the current teaching landscape also demands a particular focus on an ever-present obstacle in the classroom: electronic distractions.

Statement of the Problem

Current research rejects the idea that there is a single way for teachers to lead students to academic goals (McBride, 2004; Subban, 2006; Tomlinson, 2000). In light of addressing multiple approaches to student learning, several researchers have reported the efficacy of differentiated instruction (Gumpert & McConell, 2019; Tomlinson & Dockterman, 2002; Wormeli, 2017), which is a student-focused way of thinking about teaching and learning. Differentiated instruction acknowledges the broad range of learners in a classroom and aims to meet all students by adapting various methods. Wormeli (2017) related the dire need for differentiated instruction by saying, "If differentiated instruction advances a student's learning, then the lack of differentiated instruction puts competence and graduation in jeopardy" (p. 9). Tomlinson and Dockterman (2002) clarified that "in differentiated classrooms, teachers provide specific ways for each individual to learn as deeply and quickly as possible, without assuming one

student's road map for learning is identical to anyone else's" (para. 3). Inspired by the goal to reach a broad range of students, the study examined this goal not through the pedagogical label of differentiation but rather a long-studied theory of leadership: path-goal leadership. The study anticipated that a fresh approach to the desire to lead all students to learning is a needed study because classrooms are increasingly more diverse, both in race and ethnicity (National Center for Educational Statistics, 2018) and in achievement. The COVID-19 pandemic has severely widened the education achievement gap (Anderson, 2020; Rothstein, 2020). Rothstein (2020) also pointed out that even beyond the pandemic, the achievement gap continues to widen because of disparities in what students are doing during summer breaks as well as reliance on homework as a means for ensuring learning. Economically, many students face additional obstacles; according to the United States Census Bureau, Springfield has a 22.9% poverty rate (2019), and according to SPS.org, in 2018, 52.6% of students were identified as free or reduced lunch status.

A particular barrier to student learning in today's classroom is the problem of student distraction. Research shows cognitive multitasking is a persistent myth (Christensen, 2020; Mautz, 2017; Qian & Li, 2017; Rosen, 2008), and despite this research to the contrary, students continue to choose to multitask during class time. Checking social media or working on other digital tasks during learning time has actually become a normalized activity (Glass & Kang, 2019; Neiterman & Zaza, 2019). If distractions are ever-present, research is needed to discover teaching methods that enable students to focus on learning, especially in the high school setting where students are in the process of establishing the skills of executive function.

Ultimately, this study seeks to understand the best ways high school teachers create instructional strategies grounded in the concept of deep work and facilitate those strategies using a path-goal leadership style, specifically examining the priorities of path-goal leadership: (a) defining goals, (b) clarifying the path, (c) removing obstacles, and (d) providing support. Even more succinctly, the current study addresses the following problem: High school students need help overcoming obstacles to learning, particularly technological distractions; therefore, teachers need instructional strategies to help clear the path.

Gaps in Current Research

Differentiated instruction is grounded in research that shows positive results of differentiated instruction in classrooms with students who have diverse learning needs (Rock et al., 2008). This study acknowledges this essential concept of attempting to meet various needs in a heterogeneous classroom; the study also contends that borrowing a business or administrative leadership perspective enhances the educational perspective. Some strong research was done in adapting path-goal leadership into the classroom. Notably, Baker et al. (1990) studied community college instructors and their students and investigated how instructors successfully adapted the priorities of the path-goal theory. Baker et al. (1990) found that teacher leaders indeed serve as pathfinders who define paths, communicate expectations, consider student needs when constructing a plan, encourage student effort with feedback, and repeat goals for learning. The Baker et al. (1990) study was complex and thorough, but further investigation is needed now thirty years later to provide a more recent and relevant picture of the dynamics of a classroom, and secondly, there is an absence of research focused on path-goal analysis of teachers in

high schools. Therefore, the study sought to provide a more current picture of what makes excellent path-goal teacher-leaders in the high school setting. Further, research shows that to reduce off-task behavior, teachers must involve students by having close interactions that make learning relevant (Conderman et al., 2000; Koszewski, 1994; Qian & Li, 2017). Thus, the current study will respond to the problem of waning focus and engagement. As a practitioner in a school district that enforced masking protocols recently, I can attest that the two years of Covid-19 protocols that have intensified distance and barriers between students and teachers, now more than ever teachers and students need strategies that help students persevere through obstacles and recognize the relevance in learning activities as they progress down a path to learning.

Purpose of the Study

The purpose of this study was to increase understanding of the many ways teachers lead students along a path to learning and in so doing increase knowledge of strategies to help students overcome obstacles, ranging from immediate classroom environment distractions to challenging content. The instructional strategies that help meet the individual needs of students that this study uncovers are instructional strategies that can be employed immediately. Both college-bound and non-college-bound students need teacher attention in the form of guidance from teachers because there is room for improvement in education for all students. Currently a high school diploma does not guarantee college readiness. Most state proficiency exams target the 8th and 10th grade levels, which does not translate to college preparedness (Bell et al., 2010). For students who plan to go straight to the workforce, there is also a need: “Graduating students are inadequately prepared to participate in a meaningful way to their employers’ success

because they lack basic skills such as communication, problem solving, and critical thinking" (Junior Achievement, 2013, p. 2). More recently, the Ewing Marion Kauffman Foundation in Kansas City, MO conducted a survey that found that only 52% of student felt school prepared them for the workforce (2018). Finally, there remains a percentage of students who do not graduate: the national graduation rate in the United States is 85%, according to 2017-18 NCES data. Thus, this study empowers teachers to become classroom leaders who are path-goal teacher-leaders to students on all levels. This study acknowledges that teachers function in a vast array of schedules, filled with a range of students. However, this study proposes that no matter the abilities and structural realities of schools, the most influential factor is the teacher-leader and their instructional methodology. This study is needed because the problem of reaching all students of varying skill levels remains a priority for educators, especially considering increasingly diverse classrooms and entertaining technological distractions. Thus, the study contributes to the study of leadership at the classroom level for secondary teachers, ultimately discovering ways those teacher-leaders can clear the path to learning around many learner obstacles.

Research Question

The research question that drove this study was

1. As perceived by high school teachers, principals, and their students, how do teachers facilitate deep work to lead students to learning goals by maintaining four essential priorities as outlined by path-goal theory, namely (a) defining goals, (b) clarifying the path (c) removing obstacles, and (d) providing support?

Theoretical Frameworks

This study employed two theoretical frameworks, one primary framework of leadership and a supplemental theory that will enhance the understanding and facilitation of the leadership framework. The study viewed the landscape of teaching through the perspective of the path-goal leader, and the concept that will augment the framework is the phenomenon of deep work, which is a cognitive state of extreme focus. The study highlighted this deep work notion because it addresses an especially significant barrier to learning in the 21st century classroom, which is electronic distraction.

Path-goal leadership theory is the framework and foundation of this study. Path-goal theory is a concept that "discusses how leaders motivate followers to accomplish desired goals" (Northouse, 2019, p. 117). The vast body of research has examined how leaders lead followers by using different styles or behaviors to fit employees and the work environment. The terminology includes *leader* and *follower*, or *employee*. The study, however, aims to investigate the theory by changing the term *follower* to mean *student*, rather than employee. Altering the perspective to teacher-leader allows for a most fitting lens to view the vast and varied job that is teaching.

Path-goal theory posits that leaders will be effective to the extent that leaders can enhance the context in which followers work by clarifying cognitive challenges to help followers achieve goals (House, 1996). The theory began with an assertion that "the motivational function of the leader consists of increasing personal payoffs to subordinates for work-goal attainment and making the path to these payoffs easier to travel by clarifying it, reducing roadblocks and pitfalls, and increasing the opportunities for personal satisfaction en route" (House, 1971, p. 324). House (1996) reexamined the

theory in 1996 and articulated that the very foundation of path-goal theory is that leaders in positions of authority will be effective to the extent that they complement the environment of their followers or subordinates; path-goal leaders do this by providing appropriate cognitive clarifications to attain work goals and experience intrinsic satisfaction. The essential notion underlying the path-goal theory is that individuals in positions of authority, in the case of this study, teachers, will be effective to the extent that they complement the environment in which their subordinates, or students, work by providing the necessary cognitive clarifications to ensure that subordinates expect that they can attain work goals. Additionally, students will experience intrinsic satisfaction and recognize the value of their goal attainment. House (1996) emphasized that the function of the leader is to make clear the linkage between followers' effort and goal attainment as well as between goal attainment and extrinsic rewards. If the followers do not see these connections, House (1996) emphasized that the leader must clarify the followers' perceptions.

Another aspect that makes path-goal leadership especially suitable to the educational environment is that path-goal leadership denies the existence of a single leadership pattern for all situations (Alanazi et al., 2013). According to Jermier (1996), path-goal theory was distinguished among other theories in that it went beyond task and relationship-oriented leader behavior to include both participative and achievement-oriented behaviors. Importantly, path-goal leadership is a dyadic relationship, which focused on the individual acceptance of leaders rather than group uniformity (House, 1971; Jermier, 1996). Additionally, path-goal leadership added a complexity to the understanding of the many variables at play when studying leadership (Jermier, 1996).

House (1996) explained that path-goal leaders create connections between effort and goal attainment and "engage in behaviors that complement subordinates' environments and abilities in a manner that compensates for deficiencies" (p. 335), or as Northouse (2019) explained, path-goal leaders help followers along a path to success by choosing fitting behaviors and increasing "expectations for success and satisfaction" (p. 118). Northouse (2019) delineated four ways path-goal leaders assist followers in achieving goals: defining goals, clarifying the path, removing obstacles, and providing support. These priorities align with the teacher-leader priorities in a classroom.

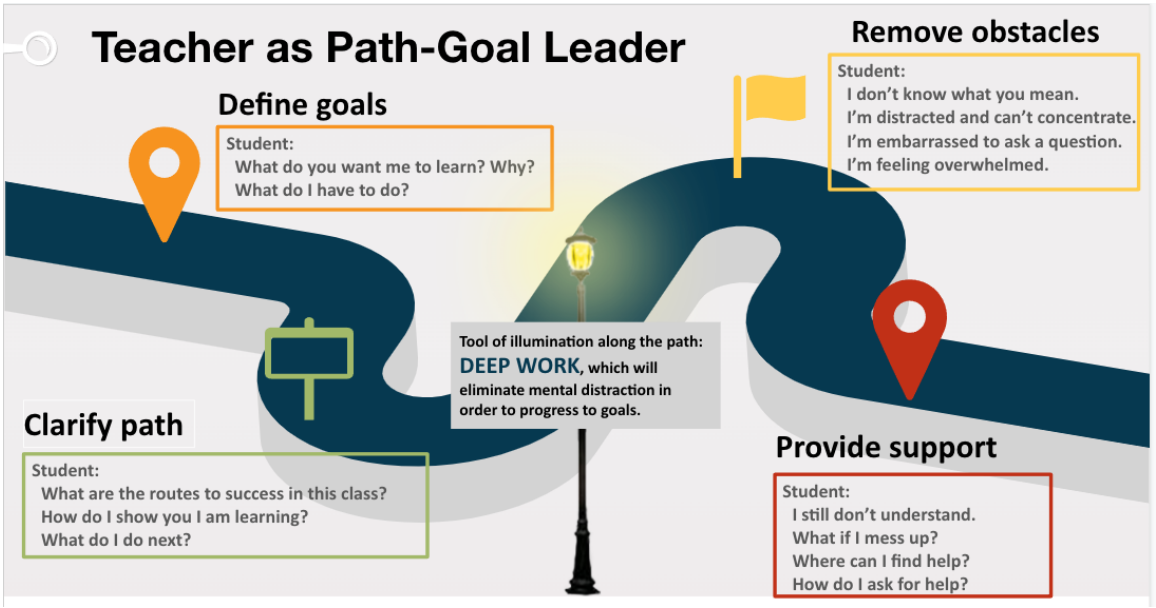
The behaviors that facilitate these path-to-goal priorities are vital to follower success; in fact, the behavior of the supervisor can be the determining factor to success (Evans, 1970). The supervisory power will have an impact upon worker behavior and satisfaction if the followers perceive the leader behavior as relevant to the goal and leader behavior is related to follower satisfaction and performance (Evans, 1970). Thus path-goal leaders must appreciate and assess all relevant variables before deciding which leadership behaviors are required (Bickle, 2017). In 1974, House and Mitchell defined four kinds of path-goal leadership behaviors, and in 1996, House added three more behaviors of a path-goal leader: (a) directive, (b) supportive, (c) participative, (d) achievement-oriented, (e) work facilitation oriented (f) group-oriented decision process, which is connected to participative leadership, (g) representation and networking oriented, and (h) value-based leadership behavior. For this study, I will keep these behaviors in mind during the analysis of data; however, the teacher participants will not be required to frame their behaviors and teaching strategies using this categorization.

One supportive element to the path-goal priorities and behaviors is the aim of leaders to facilitate ways for followers to clear their mental distractions. This goal of removing the distracting obstacles can be achieved through teacher-leaders fostering an ability for deep work from students, which is work performed with extreme concentration that allows for full potential of cognitive capabilities (Newport, 2019). Newport (2019) used this term in a business context, but the concept of focused attention certainly applies to the classroom environment as well. Literature on this concept dates back to the 1980s when cognitive load theory (CLT) was introduced, and cognitive load theory is specifically connected to the learning process.

Sweller et al. (2019) stated that cognitive load theory "aims to explain how the information processing load induced by learning tasks can affect students' ability to process new information and to construct knowledge in long-term memory" (pp. 261-262). Sweller et al. (2019) explained that CLT has always been intended to provide practical applications. "Cognitive load is increased when unnecessary demands are imposed on the cognitive system. If cognitive load becomes too high, it hampers learning and transfer. Such demands include inadequate instructional methods to educate students about a subject as well as unnecessary distractions of the environment" (p. 262). Here is where Newport's (2019) term of *deep work* overlaps: eliminating distractions will free up paths to cognitive growth. Figure 1 conceptualizes the winding path to learning and highlights the path-goal priorities, student questions about obstacles, and the highlighted concept of deep work.

Figure 1

Path-Goal Priorities for Teacher-Leaders, Including Student Point-of-View Questions



Finally, another term that grows from the concept of deep work is *deliberate practice*. Deliberate practice is different from simply time scheduled to practice or required repetitions of a task or activity; it is distinguished by being both "purposeful and systematic" (Clear, n. d., "What is Deliberate Practice?" section). Newport (2016) offered two distinct requirements for deliberate practice: (a) "your attention is focused tightly on a specific skill you're trying to improve or an idea you're trying to master, and (b) you receive feedback so you can correct your approach to keep your attention exactly where it's most productive" (p. 35). Newport (2016) also emphasized that "deliberate practice cannot exist alongside distraction" (p. 35). According to Fawcett et al. (2020), a deliberate-practice pedagogy does transfer to the classroom. The Fawcett et al. (2020) research focused on post-secondary learning; however, many facets of the study could inform secondary teaching, such as incentivizing daily preparation, providing more

feedback, emphasizing class contribution/participation, and student "after-action reports" (p. 186).

Deliberate practice in the classroom means facilitating extended engagement. Constantly re-reading or re-exposing learners to the same material will not translate to memory. Instead, according to Bjork and Bjork (2011), "learning requires an active process of interpretation--that is mapping new things we are trying to learn onto what we already know" (p. 62). Learners are not good at regulating their learning (Bjork et al., 2013). If students engage in deliberate practice, they will be forced out of their comfort zones (Ericsson & Pool, 2016), which is why a teacher-leader is essential in cultivating the deliberate practice on the path to learning. Even when studying subjects who aspire to expertise, Ericsson et al. (2007) insisted that the role of coaches and mentors is essential. Deliberate practice needs coaching along the way to provide constructive feedback (Ericsson et al., 2007). Not only do teachers need to provide feedback on the path to learning, they also must monitor and encourage increasing stamina when it comes to the needed focus to hone skills and gain knowledge. Assisting students in making gains regarding their mental endurance is a challenging and complex task, especially considering the length of the school day and the limited hours students can maintain extreme focus, which for a complete novice, could be one hour a day, and for high-performers, the limit is near four hours (Ericson et al., 1993; Newport, 2016). Therefore, the two lenses that will define the view of this study of teaching will be path-goal leadership theory and the concept of deep work.

Design of the Qualitative Study

This study is a phenomenological study of high school teachers and students in the Midwest. The phenomenon under investigation was the many behaviors these teachers employ when leading students in their classrooms to various learning objectives. As outlined by Mertens (2020), the intent of the study was to "understand and describe" this classroom leadership "from the point of view of the participant" (p. 255). As is also outlined in Mertens (2019), the study revealed the subjective experience of the teachers and students. Additionally, there was an element of cooperative participatory action research on the part of the teacher-leader participants. The participatory element of the research design occurred early in the study during the first focus group when the teacher-leader participants conversed with me as the researcher in identifying teacher-leader behaviors that best uphold the priorities of path-goal leadership. This element of participatory action research spurred inquiry to begin my study, which facilitated the phenomenological goal of uncovering the reality of the teacher experiences in the classroom. As Mertens (2020) clarified, "cooperative inquiry is based on the importance of self-determination" (p. 259), and because of this, I asked the teachers to be involved and contribute to the defining of teacher-leader behaviors; simultaneously, the teacher-leader participants heightened their own awareness and became invested in the process. In all, data were collected from teacher-leader participants, two principals, and randomly chosen students. Seeing the reality of the many leader behaviors and follower impressions provided a nuanced and authentic story of the many demands on teachers and how they clear paths for student learning.

Setting

The setting of my research and data collection was Glendale High School in Springfield, MO. Springfield is in the Southwest region of the state and in 2019 had a population of 167, 882 (US Census, "Quick Facts," 2021). Glendale High School (GHS) is in the R-XII Springfield Public School (SPS) district. SPS has the largest district enrollment in Missouri with 24,679 in 2020, according to the DESE "Student Statistics," and 52.9% of those students qualify for free and reduced lunch prices (DESE, 2021). Upper grades in the district are divided into five high schools, and overall, the ACT composite average is 20 (DESE, 2021). GHS is a building that serves grades 9-12 and has an average enrollment of 1,375 students. In 2021, the student: teacher ratio was 20:1. Its minority enrollment in 2021 was 13% (Public School Review, 2021).

Participants

According to Mertens (2020), the intent of phenomenological research is to understand the perceptions of the phenomenon being studied. In this study, to reach the goal of understanding the reality of teachers as leaders in the classroom, I chose my teacher-leaders carefully. As outlined by Patton (2002), I used a purposeful sampling by selecting information-rich cases to yield in-depth research. The purposeful way I selected my teacher participants was by choosing participants who are willing to spend extra time self-reflecting, attending a focus group, and being interviewed. Additionally, to assist me in my initial invitation to teacher-leaders, I have, as advised by Mertens (2020), had a conversation with the head principal and learning specialist of GHS where I asked their advice on creating my purposeful sampling of teacher-leaders in order to arrive at a typical-case sampling with the following criteria: (a) participants are teachers who carry a

full load of classes, (b) participants are general education teachers, (c) participants teach high school students, and (d) participants have been evaluated by building principals to be proficient in the craft of teaching/leading students. Additionally, I invited a variety of teachers, making sure to have new and veteran teachers and both core teachers and elective teachers.

Next, I invited teacher participants to be a part of my research endeavor by making clear that agreement will entail some time commitment as well as a willingness to share knowledge, practices, self-reflection, and personal teaching strategies. I emailed prospective teacher participants a recruitment email via SPS email (see Appendix A); attached to the brief recruitment email was a longer, more detailed letter prospective participants could read if they wanted to learn more about the study (see Appendix B). My goal was to gather an interdisciplinary group, aiming for multivocality, as advised by Tracy (2010). This group of six participants represented the spectrum of experiences, subjects, and required/elective classes. All teacher participants were given a copy of the informed consent statement for this study (see Appendix C).

Another source of data collection was a small-group interview with the assistant principals at GHS. The justification for asking assistant principals was that these are the evaluators of teachers; thus, they have observed a wide variety of teachers. I asked the assistant principals the same interview questions as I asked the teachers. Instead of asking "you," I phrased the questions as "teachers" (see Appendix H).

The other pool of participants was a random sampling of Glendale. The student participant group was determined purposefully by acquiring teacher rosters and following a consistent but random method of student participant selection. The convenience factor

considered students who are willing to take the time to participate in an interview about their experiences as a student. If the randomly chosen student declined my invitation, I or the teacher asked the next student listed on the roster. The general criteria for student participants were (a) student is willing to participate in a 10 to 20-minute interview with the researcher and (b) student is currently enrolled in regular education classes at Glendale. I interviewed 10 students, and the sample represents all grade levels. Every student received a paper copy or a verbal explanation of the student recruitment script via their teacher (see Appendix D).

Since student participants were enrolled in grades 9-12, nearly all student participants were under 18 and so needed a consent from a guardian as well as assent from the student (Seidman, 2019). Every student received a paper copy of the University of Missouri IRB-approved consent document that stated their willingness to engage in an interview as well as their parent consent (see Appendix C). The consent form included a brief overview of my current academic endeavors and a concise picture of the current study. This document concluded with a statement of consent for student guardians to affirm or opt out of granting me permission to use the student as an interview participant. Additionally, I asked the student to verbalize their assent to be interviewed. At every step of the process, the students could choose to withdraw from participation, even after the interview took place.

Data Collection Tools and Procedures

Upon receiving email agreements from my teacher participants, the first step in my research plan was the focus group. During this 70-minute focus group, I shared with the teacher participants the scope and sequence of the study. I contextualized the

theoretical frameworks verbally as well as providing Teacher Handout 1: Teacher as Path-Goal Leaders: Priorities of the Path-Goal Teacher-Leader (Appendix E) and Teacher Handout 2: Clearing the Mental Pathway: Cognitive Load Theory, Deep Work, and Deliberate Practice (Appendix F). Importantly, the focus group provided an overview of my conceptual frameworks to the teacher participants. The purpose was not to teach them new strategies to employ, but rather to heighten their awareness of existing strategies. These teachers are already classroom leaders with various teaching strategies. The information discussed in the focus group, however, focused our collective decision on the ways in which teachers maintain the path-goal priorities and employ certain facets of Cognitive Load Theory. The focus group raised awareness and offered new vocabulary to assign to effective teaching practices. The teachers were interested and open to learning the new vocabulary, but I made clear that they were not required to commit the terms to memory. I followed the Focus Group Protocol (see Appendix G).

Beyond the focus group, data collection included a 50-minute to one-hour, face-to-face interview with each teacher, a collection of artifacts from teacher participants, and 20-minute face-to-face interviews with students. During the entire process of data collection and analysis I carefully maintained data in secure electronic and hard copy files. My participants have a right to their privacy, and I worked to maintain their privacy. Seidman (2019) pointed out that "researchers working with interview material should not guarantee absolute confidentiality of identity," but "the interviewer can work to protect the identity of the participant" (p. 71). I followed the steps offered by Seidman (2019) in maintaining privacy for my participants, including conducting interviews in a safe space, researching more than one teacher employed in the district, and using pseudonyms. These

steps to ensure confidentiality were included in my informed consent forms (see Appendix C). Throughout my data collection process, I kept the problem statement in mind: High school students need help overcoming obstacles to learning, particularly distractions; therefore, teachers need teaching strategies to help clear paths to learning. I also shared with my adult participants my purpose statement: Increase understanding of the many ways teachers lead students along a path to learning and in so doing increase knowledge of strategies to help students overcome obstacles. Figure 2 outlines not only the categories of my participants and methods but also how my inquiries aligned with my research question: As perceived by high school teachers and their students, how do teachers facilitate the deep work to lead students to learning goals by maintaining four essential priorities as outlined by path-goal theory, namely (a) defining goals, (b) clarifying the path, (c) removing obstacles, and (d) providing support?

Figure 2

Overview of Data Collection

Data Collection	How the researcher will use the data collection tools and how they align with the research question.
Focus group of teachers; conducted via Zoom; transcription recorded using Otter.ai; notes taken by researcher; January, 2022	Researcher facilitated a group discussion regarding Teacher Handout 1 (**Appendix E**) and Teacher Handout 2 **(Appendix F)**. The focus group followed Focus Group Protocol **(Appendix G)**. Questions regarding path-goal priorities: ● How do you define goals? ● How do you clarify paths to success? ● What are some common student obstacles, and how do you remove those obstacles? ● How do you provide support along the path to success? Questions regarding deep work: ● How do you facilitate deep work and deliberate practice? ● What teaching mistakes result in shallow work by students?
Teacher interviews; 4 in-person; 2 via Zoom; transcription recorded using Otter.ai; Jan/Feb	Interview questions are aligned with all four path-goal priorities; each priority has an open inquiry as well as a second question that asks about strategies through the lens of deep work. These questions gathered practical and specific examples (**Appendix H**). ● Questions 1-3 align with defining goals ● Questions 4-6 align with clarifying path ● Questions 7-9 align with removing obstacles ● Questions 10-12 align with providing support
Teacher **artifact collection**; January/ February	Before adjourning the focus group, the researcher asked teachers to send as an attachment or give a hard copy of an artifact that exemplifies one or more of the priorities: defining goals, clarifying the path, removing obstacles, and providing support. Artifact analysis tool (**Appendix I)**.
Assistant **principals interview;** in-person; transcription recorded using Otter.ai; January	Interview questions are aligned with all four path-goal priorities; each priority has an open inquiry as well as a second question that asks about strategies through the lens of deep work. Questions gathered practical and specific examples (**Appendix H**). ● Questions 1-3 align with defining goals ● Questions 4-6 align with clarifying path ● Questions 7-9 align with removing obstacles Questions 10-12 align with providing support
Student interviews; in-person; transcription recorded using Otter.ai; January/Feb.	Interview questions are aligned with all four path-goal priorities. Question 1-2 aligns with defining goals ● Question 3-4 aligns with clarifying path ● Question 5-6 aligns with removing obstacles ● Question 7-8 aligns with providing support The terminology used in these interview questions was adapted to be appropriate for the participants. For a list of interview questions, see **Appendix J**.

Data Analysis

Data were collected from the viewpoints of teachers, evaluating principals, and students. I gathered enough rich detail to create a thick description, as suggested by Creswell (2009) and Tracy (2010). I uncovered the essence of the lived experiences of teachers and students (Merriam & Tisdell, 2016), keeping in mind that "description forms the bedrock of all qualitative reporting" (Patton, 2002, p. 438). Overall, I remained aware of the subtleties of gathering data by keeping an audit trail, as suggested by Merriam and Tisdell (2016) to maintain a running record of my interaction with the data. Part of this process included member checks, as suggested by Mertens (2020), where I sought verification with participants that my notes and analysis of their data contribution were appropriately representative of their viewpoints.

The number of interviews and artifacts were predetermined, and though I was open to additional data collection, I found in my process that the number of interviews reached what Seidman (2019) defined as enough data, the criteria of sufficiency and saturation. The focus group and six teacher-leader interviews produced the largest volume of data, and I found those interviews enlightening and far-reaching. Those interviews were mostly in-person in the teacher's own classroom. The teacher-leaders were open and eager to share their ideas and experiences. The assistant principal interview was conducted in the main office of Glendale, and this conversation yielded supplemental teacher information from an evaluator's perspective.

All ten student interviews were conducted in person, in my classroom. The students came to me either during their study hall time, or teachers wrote them a pass to leave class for 15 minutes. Though these students had never been enrolled as my student,

most had seen me on campus. All of them were assured by their teacher that I was seeking their input as part of my research, and they all had the consent form reviewed for them, both the student and guardian details. Every student received a paper copy of the University of Missouri IRB-approved consent document that stated their willingness to engage in an interview as well as their parent consent. This document concluded with a statement of consent for student guardians to affirm or opt out of granting me permission to use the student as an interview participant. Additionally, I asked the student to verbalize their assent to be interviewed. At every step of the process, the students knew they could change their mind about participation, even after the interview took place. All students appeared at ease and willing to answer questions about school.

Upon finishing the collection of all data, I considered the multiple types of data collected, focus group transcripts and notes, interviews, and artifacts, and attempted to crystalize "a more complex, in-depth...understanding" (Tracy, 2010, p. 844) of effective teacher-leader behaviors and instructional strategies. By using multiple data sources offering varied voices, my qualitative report displays multivocality, which communicates to my audience helpful insights, including some differing opinions (Tracy, 2010). I approached the transcripts of interviews with "an open attitude, seeking what emerges as important and of interest from the text" (Seidman, 2019). I marked individual passages, categorized them, and searched for thematic connections (Seidman, 2019). The emerging thematic connections helped guide my analysis to determine what teacher behaviors are especially efficacious in the classroom. I asked for more objective assistance from Amy Knowles, a professor and doctoral student at Missouri State University, in overseeing my process of data analysis, especially in my categorizing of themes and the conclusions I

draw about best practices. Knowles provided a helpful, outside perspective in keeping my analysis as accurate as possible.

I used the multiple data points to craft profiles of teacher-leaders. Seidman (2019) encouraged the creation of profiles or vignettes of participant experiences because he found the profiles an effective way of sharing data. The pictures of each educator shone through as powerful because they embodied authentic voices, real stories. As Seidman (2019) advised, I presented the profiles by using the words of the participant. The participants and I achieved multivocality through our collaboration, their personal observations and reflections as teachers and principals, and the student conversations involved in interviews.

Positionality and Quality of Research

I am an insider in the community I studied, and I hope to encourage change (Merriam & Tisdell, 2016). My current position as a high school teacher whose school who carefully monitors graduation rates and prioritizes student relationships with students offers a perfect opportunity to do timely and relevant work, descriptors set forth by Tracy (2010) as criteria for quality qualitative research. Also mentioned by Tracy is rich rigor, which this study aligns with, including a solid foundation in theoretical constructs and abundant time in the field since I work every day in the context of my study.

My role at GHS is an English language arts teacher who teaches both regular education class and advanced, dual credit courses. My coursework is at the sophomore and senior levels. My personal investment in the research as well as the context of the study most certainly should be addressed because the preparation and enthusiasm for this

study are based upon my 20 years of experience as a teacher and my participation in an EdD program I am personally dedicated to. Since I am a veteran teacher, I bring an attitude that teachers on the frontlines are the ones who truly understand the challenges of the classroom, so I entered this endeavor imagining that my findings will speak to fellow teachers who wish to hear from current practitioners. Further, I am a White, middle-class, cisgender woman, and I recognize that those traits might factor in to my ability to participate in dialogue with both students and fellow teachers since GHS is in the Midwest and has a majority White teaching staff as well as student population.

Additionally, the teacher participants I worked with are both my colleagues and friends. I did not find that this connection affected me emotionally when interpreting teacher reflection interviews and artifacts. I remain immersed in the research field, but I strove to maintain what Patton (2002) termed "empathic neutrality" (p. 50), where I sought to understand but not impose judgments. Patton (2002) stated critics have said qualitative inquiry is "too *subjective*, in large part because the researcher is the instrument of both data collection and data interpretation and because a qualitative strategy includes having personal contact with and getting close to the people and situation under study" (p. 50). Patton (2002) concluded, however, that his "pragmatic solution" (p. 51) to this issue is to avoid objectivity and subjectivity and instead focus on language such as *trustworthiness* and *authenticity*. Thus, acknowledging I cannot be truly objective, I endeavored to tell true stories through my shared experience and conversations with my participants.

One way I diminished personal bias as I approached my data analysis was referring to my teacher participants and student participants by pseudonyms. I maintained

anonymity for all participants upon sharing data at the conclusion of my analysis. Pseudonyms were selected in a way that "does justice to the participant" by considering ethnicity, age, and experience (Seidman, 2019). Overall, I see my positionality as one that lends itself to the trustworthiness of the research. I think my position as a current practitioner strengthened the trust other practitioners felt toward my work. Since I am in the classroom still, and I have relationships with students and colleagues, I trusted they would tell me the truth. Now after completing the study, I indeed believe my collected stories represent an authentic, lived experience of teachers.

Before any of my consent forms or teacher participant meetings took place, I prepared by revisiting the American Research Association's Code of Ethics and Ethical Standards of Conduct (AERA, 2021). I was granted IRB approval through the Springfield Public school district, and I received IRB approval through the University of Missouri. Throughout the process, I kept in mind the following inquiry elements that contribute to credibility of qualitative inquiry:

- *Rigorous methods* for doing field work that yield high-quality data that are systematically analyzed with attention to issues of credibility;
- *the credibility of the researcher*, which is dependent on training, experience, track record, status, and presentation of self; and
- *philosophical belief in the value of qualitative inquiry*, that is, a fundamental appreciation of naturalistic inquiry, qualitative methods, inductive analysis, purposeful sampling, and holistic thinking. (Patton, 2002)

This study employed both inductive and deductive analysis approaches. The study began with a foundational theory, which lent itself to a deductive approach; however, the tailor-

made educational version of the path-goal theory thoroughly arose from an inductive approach.

In terms of how well my findings will transfer to other practitioners, I strengthened the transferability of my study by including teachers and questions outside of the English classroom, as explained by my interdisciplinary team of participants. As far as the limitations of the population in a larger sense, it is reasonable to note that my students are in the Midwest of the US in an urban school district. Students in rural schools or in cities near the coasts, might experience a slightly different culture than my population. Opportunities for further research might be a longitudinal study that involves quantitative methods to compare leadership behaviors and how they affect grades.

Definitions of Key Terms

Since this study draws vocabulary from two theoretical frameworks, path-goal theory and cognitive load theory, the following list is to quickly clarify terminology found throughout the dissertation.

- **Achievement-oriented behavior:** This behavior of path-goal leaders challenges followers to perform excellently and behave in a way that inspires follower confidence and has the effect of followers believing they can meet challenging goals (House & Mitchell, 1974).
- **Attention residue:** The mental lag a person experiences when attempting to give attention to a next task (Leroy, 2016).
- **Cell phone culture:** This term is used broadly in this paper to acknowledge the ubiquity of phones in the lives of American teenagers; it is also used specifically to

the site of the study, Glendale High School, where student habits are to always have their phone within reach, even during instruction.

- **Clarifying the path:** This concept is a priority for the path-goal leader. Particularly, clarifying the path refers to clarifying cognitive challenges to help students achieve goals. Specific to path-goal theory, House (1971) stated that clarifying the path meant making the path to work-goal attainment easier; this is done by reducing roadblocks and increasing opportunities for personal satisfaction from the followers. For a teacher path-goal leader, clarifying the path answers student questions such as *What* are the routes to success in this class?
- **Clearing the path of distraction:** Student distraction can come from many sources, but for this paper, the distraction the research and data collection will focus on is that of electronic distraction, e.g., games, texting, social media, videos, etc.
- **Cognitive load theory (CLT):** This theory clarifies how information is taken into the brain; specifically, CLT focuses on the processing load of mental tasks and how volume of new information and distractions can diminish learning and prevent knowledge in long-term memory (Sweller et al., 2019).
- **Deep work:** Deep work is work performed with extreme concentration that allows for full potential of cognitive capabilities (Newport, 2019).
- **Defining goals:** This concept is a priority for the path-goal leader. For a teacher path-goal leader, defining goals is the process of communicating to students what their learning objectives are for the day, the month, the semester. It answers the student questions of *What do you want me to learn? Why?* And *What do I have to do?*

- **Deliberate practice:** Deliberate practice is extended engagement of thinking and/or doing a task. For students, this means prolonged frustration while grappling with a subject.
- **Directive leadership behavior:** Directive behavior is exhibited by path-goal leaders; it includes explicit expectations and removing ambiguity for followers (Northouse, 2019).
- **Dyadic relationship:** The relationship between path-goal leaders and followers requires interaction; this dyadic relationship focuses on individual acceptance of leaders rather than group uniformity. This detail lends itself well to a classroom environment because a teacher is more powerful with individual relationships with students.
- **Follower/employee/student:** Originally, path-goal theory used a business model and labeled employees as followers. This study equated followers with students.
- **Group-oriented behavior:** This type of leader behavior is connected to participative leadership and concerns how decisions for the group are made (Northouse, 2019). Specifically, group-oriented processes include posing problems, not solutions to the group (House, 1996).
- **Map:** This dissertation employs an extended metaphor of teacher as cartographer, so in the context of the paper, maps are representing teacher plans for student success, e.g., lesson plans, activities, calendars, revision processes, etc. Extending the metaphor, teachers are also referred to as navigator and pathfinder in order to emphasize the guiding nature of teaching.
- **Navigator:** see Maps

- **Participative behavior:** This type of leader behavior encourages followers to share in the decision-making process. The desired effect is to increase follower autonomy and intensify social pressure to stay on the path.
- **Path-goal leader:** Originally, path-goal theory used a business model and labeled employers or managers as leaders. This study labeled teachers in their classroom *teacher leaders*.
- **Path-goal priorities:** see Clarifying the Path, Defining Goals, Providing Support, Removing Obstacles,
- **Pathfinder:** see Maps
- **Providing support:** This concept is a priority for the path-goal leader. For a teacher-leader, this is a perpetual priority in the form of feedback and re-explanations. Providing support answers student questions such as *What if I still don't understand?* and *How do I ask for help?*
- **Removing obstacles:** This concept is a priority for the path-goal leader. For a teacher-leader, this task includes controlling the learning environment to create an opportunity for learning. The teacher-leader may need to change their approach or change pace and procedure of a lesson. Removing obstacles responds to student concerns such as *I'm distracted and can't concentrate.* And *I'm feeling overwhelmed*.
- **Representation and networking-oriented behavior:** This leader behavior regards how the leader represents their group to others. Representation is networking; in the context of teachers, this would be connections to principals, coaches, and prospective colleges.

- **Supportive behavior:** Supportive behavior aims to lead by creating a friendly and supportive environment (House & Mitchell, 1974) by being a friendly and approachable leader (Northouse, 2019).
- **Teacher-leader:** see path-goal leader
- **Value-based leadership behavior:** This leader behavior refers to leaders who accomplish extraordinary follower commitment (House, 1996); value-based leaders inspire passion.
- **VIE Theory of Motivation:** Motivation arises from a person's belief that effort enhances performance, quality performance will result in rewards, and the reward justifies the effort (Vroom, 1964).

Significance of the Study

The audience for this study is primarily high school practitioners (teachers) who desire to understand the many facets of the job of teacher more completely. By considering the teacher as a leader, the many complexities of their behaviors can be highlighted, as well as what a tremendous task it is to lead a classroom full of followers to attain learning goals. In the ocean of pedagogical buzzwords and terms that set education apart from the larger body of leadership, this study offers a legitimizing and worthy label to teaching as a demanding profession. Patton (2002) spoke of the power of metaphors to communicate information, keeping in mind the metaphor serves the data. I used the metaphor of teacher as pathfinder to intensify my findings. More broadly, the audience is any teacher, counselor, or principal who is interested in methods of reaching students on a personal, individual level. This study provides a picture of what Creswell (2009) called the "lived realities encountered in the field setting" of GHS (p. 13).

Research is needed to find out more about how students behave, feel, and think about school engagement and how teachers can increase engagement (Fredricks et al., 2004; Keyes, 2019). My research contributes to this need. All teachers, including professors, are forced to deal with students who need assistance in overcoming barriers to learning such as distractions and a sense of being overwhelmed with tasks. My study aims to draw from in-depth investigations of teachers as leaders to arrive at instructional strategies that teachers and professors can use to assist students in navigating the academic landscape. Students need guides to clear the path of myths, such as multitasking (Mautz, 2017; Qian & Li, 2017), which is a commonly used strategy students erroneously believe is helpful (Duncan et al., 2012; Jiang, 2018). It's not a solution, and device distraction is an issue in high school as well as in the college classroom (Cheong et al., 2016). Therefore, if my study can aid in decreasing those factors that add to the cognitive load of students, practitioners can utilize the strategies put forth in this study immediately.

I intend to share my data and findings with my current building leadership team at Glendale High School. Further, the Glendale Learning Specialist has agreed to help me facilitate professional development for the Step Up program she leads in our building, a program that fosters growth and reflection for new teachers. In terms of existing literature, my study serves the purpose of combining theory with practice and offering a depth of understanding and immediate suggestions for teachers and principals; for scholars, the study acknowledges the complexities of teaching the 21st century young adult learner.

Summary

This study explored a complex dynamic that occurs every day across the United States. Teachers everywhere are assessing needs and directing students to learning goals, and this multifaceted leadership position deserves an in-depth study to both see it clearly, and by seeing and analyzing it, learn from it. High school students need guidance as they traverse the terrain of high school, and the help they seek is a teacher as a path-goal leader. A teacher as a path-goal leader plays the part of both pathfinder and mapmaker; all moving and disparate parts of the educational journey must be manipulated and framed by the teacher-leader. And so, to learn more about this synergetic phenomenon, this study examined and reported on the reality of the teacher-leader.

The study utilized a framework based upon the path-goal leadership theory that prioritizes four ways path-goal leaders help followers achieve goals: defining goals, clarifying the path, removing obstacles, and providing support. These priorities align with the teacher-leader priorities in a classroom. Studying behaviors that facilitate these priorities provided a framework for categorizing the many techniques of a teacher as pathfinder. The methods included: (a) directive, (b) supportive, (c) participative, (d) achievement-oriented, (e) work facilitation oriented, (f) group-oriented decision process, which is connected to participative leadership, (g) representation and networking oriented, and (h) value-based leadership behavior (House, 1996).

In the quest to fully understand teaching as leading, in addition to viewing from the lens of path-goal theory, this study also focused on the barrier of distraction. The special focus is rooted in the acknowledgement that teachers are leaders of followers with powerful distractions, and leading in a 21st century classroom means needing skills to

help students clear their mental paths of digital diversions. In summary, this study increased understanding of the many ways teachers lead students along a path of learning and in so doing increase knowledge of strategies to help students overcome obstacles.

SECTION TWO: PRACTITIONER CONTEXT OF STUDY

Introduction to Practitioner Context

The primary audience for the study is secondary teachers. High school teachers have the most to gain from this study because they will be a significant part of my participants, and the goal of the study is to learn from actual and immediate experiences of teachers to gain deeper understanding of the craft of teaching as well as glean effective teaching strategies. Beyond teachers in classrooms, principals are a secondary audience because they are closely connected to evaluating and monitoring the teaching that happens in their buildings. This study is contextualized in this section by an overview of the Missouri Learning Standards, the Springfield Public School district priorities, high school priorities, and finally the teaching priorities of Glendale High School. I have outlined exactly how an acknowledgement of the various teaching priorities and standards connects to the study, including linking existing strategies to research and explaining why this study reframed the numerous priorities. This section concludes with implications for research in the practitioner setting and elaborates on the problem of technological distraction at the site of my study as it relates to the deep work component of the research question.

Missouri Learning Standards

The Missouri Learning Standards (MLS) outline the learning targets for Missouri students according to grade level. First, in January of 1996, Missouri adopted the Show-Me Standards, which the Department of Elementary and Secondary Education (DESE) defined as "a demanding set of content and process standards that have proved to be an excellent frame of reference for student performance." Later Grade-Level expectations (GLEs) were developed to delineate goals for instruction. Additionally End-of-Course

(EOC) assessments were developed for high schools, and Course-Level expectations (CLEs) were made available for course-specific objectives (DESE). Currently, Missouri teachers use the latest state standards called the MLS. These standards

> help ensure students learn basic and higher-order skills, including problem solving and critical thinking. The standards are relevant to the real world and reflect the knowledge and skills students need to achieve their goals. Learning outcomes improve when students, parents and teachers work together toward shared goals. The Missouri Learning Standards give school administrators, teachers, parents and students a road map for learning expectations in each grade and course. (DESE, 2021, "About the Missouri Learning Standards")

Importantly, these standards "do not dictate curriculum"; DESE leaves the particular texts, labs, teaching strategies, student tasks, etc. to the various decision makers in the districts in the state.

The Missouri Learning Standards are available online and are clearly categorized with a coding system that defines and clarifies concepts: (a) grade level, (b) strand or domain, (c) big idea, (d) concept or cluster, and (e) expectation. The various facets of each subject, including English Language Arts, Math, Social Studies, and Science, are not only labeled but also explained with specific language indicating specific skills and concepts. The DESE website also offers data of performance at the state level, district level and building level.

District Learning Priorities

The current study was conducted at Glendale High School in the Springfield Public School (SPS) district. The district promotes a strategic plan that "represents a

collective vision defined by [the] community for the future success of Springfield Public Schools and its 25,000 students" (SPS). Created by various stakeholders, the strategic plan includes a mission to "prepare all students for tomorrow by providing engaging, relevant and personalized educational experiences today, a vision to "serve as a catalyst for lifelong learning, equipping students for their futures," and a collective commitment that the district believes "all individuals have potential to (a) embrace the needs of the whole child, (b) create, communicate and demonstrate high expectations, (c) inspire and instill a passion for learning, (d) demonstrate flexibility, agility and adaptability, (e) foster a culture that supports and engages high-quality teachers and leaders, (f) cultivate community ownership, (g) maintain a safe and secure learning environment, and (h) engage all staff to positively impact student success (SPS).

This multifaceted district strategic plan works in combination with the MLS for the entire district, including the state-mandated standardized tests. Additionally, all educators in the district are required to create and monitor personalized growth plans as well as participate in evaluations according to DESE standards. Teacher quality standards put forth by DESE are the same quality standards used for teacher evaluations:

1. Content knowledge aligned with appropriate instruction: The teacher understands the central concepts, structures, and tools of inquiry of the discipline(s) and creates learning experiences that make these aspects of subject matter meaningful and engaging for all students.
2. Student Learning, Growth and Development: The teacher understands how students learn, develop, and differ in their approaches to learning. The teacher

provides opportunities that are adapted to diverse learners and support the intellectual, social, and personal development of all students.

3. Curriculum Implementation: The teacher recognizes the importance of long-range planning and curriculum development. The teacher develops, implements, and evaluates curriculum based upon student, district, and state standards data.
4. Critical Thinking: The teacher uses a variety of instructional strategies and resources to encourage students' critical thinking, problem solving, and performance skills.
5. Positive Classroom Environment: The teacher uses an understanding of individual/group motivation and behavior to create a learning environment that encourages active engagement in learning, positive social interaction, and self-motivation.
6. Effective Communication: The teacher models effective verbal, nonverbal, and media communication techniques with students, colleagues, and families to foster active inquiry, collaboration, and supportive interaction in the classroom.
7. Student Assessment and Data Analysis: The teacher understands and uses formative and summative strategies to assess the learner's progress and uses both classroom and standardized assessment data to plan ongoing instruction. The teacher monitors the performance of each student, and devises instruction to enable students to grow and develop, making adequate academic progress.
8. Professionalism: The teacher is a reflective practitioner who continually assess the effects of choices and actions on others. The teacher seeks out opportunities to grow professionally to improve learning for all students.

9. Professional Collaboration: The teacher has effective working relationships with students, parents, school colleagues, and community members. (DESE, 2013, "Teacher Standards")

Finally, another noteworthy priority of the district is the graduation rate. As mentioned in the previous section, DESE collects and makes available data for the state, districts, and buildings. The SPS district monitors the state graduation rate, which in 2021 was 89.2% (DESE, 2021, "State of Missouri") and the district graduation rate, which was 94% in 2021 (DESE, 2021, "District APR Summary Report-Public").

Secondary Teacher Priorities

The district prioritizes the MLS for all teachers, and the specific DESE standards for high school teachers are categories and linked on the sps.org website in a section called "High School Missouri Learning Standards and Major Instructional Goals" (SPS, 2021). High school teachers began the 2021-22 school year by creating personalized growth plans focusing on the following:

- Standard 3, Quality Indicator 1: Implementation of curriculum standards
- Standard 5, Quality Indicator 3: Classroom, school and community culture
- Standard 9, Quality Indicator 2: Collaborating to meet student needs

Teacher Priorities in the Study Site

Finally, to funnel down to the building site of the study, Glendale High School (GHS) prioritizes all of the district priorities. While doing so, administrators and teachers consider building data such as a graduation rate of 90.9% in 2019 and academic achievement in English, which is reported to be on track; math, which is approaching growth expectations; and science, which is exceeding expectations (DESE, 2021, "2019

APR Report"). Teachers at GHS work in various Professional Learning Communities (PLCs) that represent department communities as well as the entire faculty. GHS teachers work closely with their supervising assistant principal as well, particularly regarding the aforementioned personalized growth plans and evaluations.

Connection of Established Priorities to the Study

The current study sought to reframe these extensive and complex standards and priorities for high school educators to gain understanding and strategies by looking at these extensive directives from a different perspective. Bolman and Deal (2017) noted that it is essential for organizations to consider multiple perspectives because frames "are sources of new questions, filters for sorting essence from trivia, maps that aid navigation, and tools for solving problems and getting things done" (p. 23). This study does not posit that the established, multi-level framing of learning standards is wrong; instead, the study aimed to reframe for the purpose of gaining insight. Wedell-Wedellsborg (2017) noted that initial framing of a problem does not have to be wrong in order to merit a new perspective; in fact, "identifying a different aspect of [a] problem can sometimes deliver radical improvements." One effective method of reframing is to question the overall objective. Here is where the study sought to look at the larger picture and attempted to do what Wedell-Wedellsborg (2017) advised: "[pay] explicit attention to the objectives of the parties involved, first clarifying and then challenging them." The study paid attention to the objectives by imagining them in four categories of priorities instead of the tremendous total of objectives aligned by the state. The study encouraged and facilitated reframing discussion of the standards teachers discuss nearly daily and with which they are extremely familiar. By simplifying the classifications of all the expectations of

teachers, the study clarified what is most important and open up possibilities of gathering innovative teaching strategies. Simply, this study took numerous priorities and studied them as they fell into four path-goal priorities with a particular interest in the most timely practices that fit a classroom in the year 2022.

Research-Based Strategies Currently Supported in SPS District

The research foundation for all these quality standards is heavily represented with work by John Hattie, a Professor of Education and Director of the Visible Learning Labs at the University of Auckland, New Zealand. Dr. Hattie's book, *Visible Learning: A Synthesis of Over 800 Meta-Analyses on Achievement* offers findings on 15 years of research. Hattie's (2009) study aggregated, correlated, and ranked factors that most improved learning outcomes. A highlight of Hattie's findings stated the following:

> The act of teaching requires deliberate interventions to ensure that there is cognitive change in the student: thus, the key ingredients are awareness of the learning intentions, knowing when a student is successful in attaining those intentions, having sufficient understanding of the student's understanding as he or she comes to the task, and knowing enough about the content to provide meaningful and challenging experiences in some sort of progressive development. It involves an experienced teacher who knows a range of learning strategies to provide the student when they seem not to understand, to provide direction and re-direction in terms of the content being understood and thus maximize the power of feedback, and having the skill to "get out the way" when learning is progressing toward the success criteria. (p. 23)

Hattie goes on to say that facilitation of such an environment would require a teacher to employ a vast range of learning strategies, and to be "cognitively aware of the pedagogical means to enable the student to learn" (p. 23). Thus, teachers must be

> aware of which of their teaching strategies are working or not, be prepared to understand and adapt to the learner(s) and their situations, contexts, and prior learning, and need to share the experience of learning in this manner in an open, forthright, and enjoyable way with their students and their colleagues. (p. 23)

The aim of this study was to facilitate what Hattie advised, to share the experience of what strategies work and why. Further, this study intended to build upon the combination of teacher-centered teaching and student-centered teaching that Hattie endorsed. There is a need for explicit teaching of students, communicating what students need to know and how they can do those things (Marzano et al., 2001). Blending the methods of direct teaching and constructivist teaching, which promotes learning by learners being actively involved in knowledge building, is foundational to Hattie's research, and the study encouraged the simultaneous action of the two methods as well.

Another noteworthy aspect of Hattie's (2009) findings is the aspects of teaching approaches that are associated with student learning:

- paying deliberate attention to learning intentions and success criteria;
- setting challenging tasks;
- providing multiple opportunities for deliberative practice;
- knowing when one (teacher and student) is successful in attaining these goals;
- understanding the critical role of teaching appropriate learning strategies;
- planning and talking about teaching;

- ensuring the teacher constantly seeks feedback information as to the success of his or her teaching on the students. (p. 36)

The above aspects of teaching are parallel to the essential priorities as presented in the studying, particularly a focus on deliberate attention and practice. The study highlighted this aspect and considered ways in which teachers facilitate deliberate practice, or deep work. Additionally, the study itself facilitated planning and talking about teaching and it encouraged that crucial component of feedback.

Further Implications for Research in the Practitioner Setting

Since path-goal theory focuses on how leaders motivate followers to realize desired goals (Northouse, 2019), there is an opportunity in classrooms to observe and reflect on how teachers do this for students. The study considered the creation of student goals and the leadership on the teacher's part to guide the students to their learning goals. Careful consideration of creating challenging goals is important for growth. Teachers as path-goal leaders must construct maps with learning destinations that are difficult but not seen as "unattainable, given the student's level of self-efficacy or confidence; rather teachers and students must be able to see a pathway to attaining the goal" (Hattie, 2019, p. 166). Thus, teachers as pathfinders can only navigate through great challenges with continual communication and feedback: "The greater the challenge, the higher the probability that one seeks and needs feedback, and the more important it is that there is a teacher to ensure that the learner is on the right path to successfully meet the challenge" (p. 38). Another important aspect of the study is the investigation into the student perspective. Even with a guide, a student must be an active participant (Hattie, 2019). Teachers need to reflect on what strategies and environments encourage students to be

active in their own learning. The study generated conversations and a collection of artifacts that all contribute to a greater understanding of what it looks like for teachers in a classroom to successfully guide students to learning.

Distraction at Glendale High School: Technology as Distraction

The study sought to meet a particular need in classrooms across the country, which is the problem of electronic distraction. To narrow the focus, however, I have analyzed this particular issue as it relates to the site for the study, namely the current district (and thus building) electronic device policy for cellular phones, which has two separate statements in the official handbook: (a) "Electronic devices, such as…cellular phones…may be in the student's possession as long as they are not disruptive to the educational process or in violation of site use procedures" (p. 26), and (b) cell phones are "prohibited during the school day" (Springfield Student Handbook, 2021, p. 61). In reality, cell phones at the high school level are pervasive, and the number of students using cell phones during any given hour is more common than not. Because of the constant presence of cell phones and the desire to occasionally use them for educational practices, teachers are left to create their own policy for their individual classrooms. This ambiguous departure from the handbook is not empowering for teachers because teachers have limited administrative power. The problems at GHS are the practical failings facing teachers in implementing individual classroom policies that are both open and not disruptive to the educational process. Teachers are fighting two cultures, the American iGen culture of ubiquitous phone use and the district's own championing of technology in schools, which includes each student also having a Chromebook. Therefore, the average GHS classroom teacher must maintain control and focus of 25 to 35 students for 90

minutes with each student in possession of *two* personal technological devices. The GHS school culture is so permissive that the allowance for a "teacher policy" has become less a professional option of teacher autonomy and more of a management task.

The reality of the student cell phone policy is an organizational problem because it is attributed to individuals, and as Bolman and Deal (2017) warned, "targeting individuals while ignoring larger system failures oversimplifies the problem and does little to prevent its recurrence" (p. 27). Thus, it is problematic to keep cell phone issues relegated to individual teachers. Below is an outline of the problematic nature of the cell phone culture at GHS with the aim to inform better practices and strengthen a more united effort by individual teachers in classrooms. An analysis from the frontlines of the classroom is surely relevant to the administrative team that leads the building.

The hierarchy at GHS gives principals the power to assign consequences to infractions, but the teachers are not given this power. According to the SPS Handbook (2021), teacher-reported cell phone offenses are to result in a conference up to detention for the first two infractions, and a detention up to a day of in-school-suspension after (p. 61). These consequences are carried out by the assistant principal; therefore, when a policy offers teachers the option of creating their own technology rules, this power is limited. In the current situation, a teacher is left with an option of reward power, or sending the student on to the true authority, an administrator. Importantly, "the strength of the reward power depends upon the probability that [the teacher] can mediate the reward, as perceived by [the student]" (French & Raven, 1959/2005, p. 313). Thus, the problem is that the only rewards a teacher can reasonably offer are connected to school (grades, classroom privileges, learning), which are options students who choose cell phone distraction do not prioritize. One could argue that a teacher could use free cell

phone time as a reward itself. This reward indeed does happen; however, the problem of distraction is most severe with students who do not or cannot complete tasks. With limited power, a teacher cannot apply immediate and clear repercussions for cell phone use during instruction. Real consequences can only happen outside the classroom, and teachers reluctantly seek these out because if the student does get a punishment, it involves more missed class time and opportunity to have more screen time in an in-school-suspension classroom. Moeller (1968) explored the effects of structure on teacher morale and found that between a rigid system and a lax one, teacher morale favored a stricter structure. For the cell phone policy, a united front against distraction from learning would work best. "Formal structure enhances morale" (Bolman & Deal, 2017) when it helps teachers teach--if both teachers and students had clear expectations and consequences, teachers would feel empowered, and students would not shrug off the threat.

Even if we remedy the power issue, it is important to consider all facets of a teacher's coercive power. Notably, Levi (2017) established that even if coercive power results in behavior that is desirable, if people only act on reward and coercive power, "the result is compliance, but [not] acceptance" (p. 159). If teachers reach for coercive power, they risk hurting relationships. If the overall culture at GHS emphasized how phones can be great connectors, but we must put them down to learn, teachers could develop their most effective power, which is the power of the atmosphere they create in their classrooms. Nevertheless, we can't deny the importance of the power and consequences foundation. Bolman and Deal (2017) mentioned a relevant point when discussing situational leadership as considering styles in terms of subordinate "readiness." If students are "neither willing nor able," (p. 332) then the teacher must be

direct with commands and swift consequences. If students show a desire to learn but need guidance, then the teacher can "coach" (p. 332) them to appropriate learning and focus priorities. Bolman and Deal (2017) concluded Hersey and Blanchard's situational leadership model by saying if the subordinate (student) is "both able and willing, the leader should delegate and get out of the way" (p. 332). And here is the end goal--students would understand the reason behind the rules, self-regulate with devices at their desks (not locked away), and be advocates for their own learning.

The study aimed to strengthen the teacher practices that encourage focus and eliminate distraction. In the process of talking and reflecting on this issue, the study seeks to inspire an alliance between teachers and administrators in creating a culture that embraces technology that enhances learning but rejects mindless distraction that is a barrier to education. If teachers are both the cartographers and scouts along the path to learning, cell phone use is taking wrong turns on the path. If principals and teachers alike can have stronger methods of redirecting their wrong turns, the whole learning culture will be strengthened.

Summary

The Missouri Learning Standards emphasize helping students learn higher-order skills, namely problem solving and critical thinking. The many standards are meant to be a road map for learning expectations. Springfield Public Schools follows the MLS, using the learning targets as a foundation of the district's strategic plan of preparing all students for their futures by providing engaging, relevant, and personalized educational experiences. Educators in SPS not only prioritize the learning standards, but also care deeply about the graduation rate. To gain insight into how to carry out the various learning goals, the study reframed them into fewer categories, imagining the methods for

reaching them all through the lens of the four priorities of the path-goal leader: (a) define goals, (b) clarify the path, (c) remove obstacles, and (d) provide support. This alteration of perspective and deep reflection offered clarification on what goals are most important and the best, current methods teachers are using to lead students to learning goals. Finally, reflection and gathering of best practices also considered how the element of technological distractions are obstacles that cannot be denied on the path to learning.

SECTION THREE: SCHOLARLY CONTEXT FOR THE STUDY

Introduction to Scholarly Context

Current research rejects the idea that there is a single way for teachers to lead students to academic goals (McBride, 2004; Subban, 2006; Tomlinson, 2000). Considering addressing multiple approaches to student learning, several researchers have reported the efficacy of differentiated instruction (Gumpert & McConell, 2019; Tomlinson & Dockterman, 2002; Wormeli, 2017), which is a student-focused way of thinking about teaching and learning. Differentiated instruction acknowledges the broad range of learners in a classroom and aims to meet all students by adapting various methods. Inspired by the goal to reach a broad range of students, the study examined this goal not through the pedagogical label of differentiation but rather a long-studied theory of leadership: path-goal leadership. The study anticipated that a fresh approach to the desire to lead all students to learning is a needed study because classrooms are increasingly more diverse, both in race and ethnicity (National Center for Education Statistics, 2019), and in achievement. The COVID-19 pandemic has severely widened the education achievement gap (Anderson, 2020; Meckler et al., 2020; Rothstein, 2020). Rothstein (2020) also pointed out that even beyond the pandemic, the achievement gap continues to widen because of disparities in what students are doing during summer breaks as well as reliance on homework as a means for ensuring learning.

A particular barrier to student learning in today's classroom is the problem of student distraction. Research shows cognitive multitasking is a persistent myth (Christensen, 2020; Mautz, 2017; Qian & Li, 2017; Rosen, 2008), and despite this research to the contrary, students continue to choose to multitask during class time. Checking social media or working on other digital tasks during learning time has actually

become a normalized activity (Glass & Kang, 2019; Neiterman & Zaza, 2019). If distractions are ever-present, research is needed to discover teaching methods that enable students to focus on learning, especially in the high school setting where students are in the process of establishing the skills of executive function. The following exploration of literature provides a thorough context for the present student that wishes to use path-goal leadership as a framework for student-centered pedagogy with a special focus on the student technology distraction as an obstacle to learning. Ultimately, this study seeks to understand how teachers make instructional strategies grounded in the concept of deep work and facilitate those strategies using a path-goal leadership style, specifically examining the priorities of path-goal leadership: (a) defining goals, (b) clarifying the path, (c) removing obstacles, and (d) providing support. The following contextual literature will explore path-goal theory, including background, definition, leader behaviors, and follower characteristics; the path-goal framework for the study; and a discussion of how clearing the path for learning must involve eliminating distractions by striving for deep work.

Path-Goal Theory

Path-goal theory is a concept that "discusses how leaders motivate followers to accomplish desired goals" (Northouse, 2019, p. 117). The vast body of research has examined how leaders lead followers by using different styles or behaviors to fit employees and the work environment. The terminology includes *leader* and *follower*, or *employee*. The study, however, aims to investigate the theory by changing the term *follower* to mean *student*, rather than employee.

Background and Foundation of Path-Goal Theory

Path-goal theory grew from Vroom's VIE Theory of Motivation that focuses people's motivation toward certain behaviors using three interactive components: valence, the value placed upon the reward; instrumentality beliefs, an individual's perception about the extent to which performance will result in goal attainment; and expectancy beliefs, the belief that efforts are linked to performance (Vroom, 1964). Briefly, this theory suggests that motivation arises from a person's belief that (a) there is a positive correlation between efforts and performance, (b) favorable performance will result in a desirable reward, (c) the reward will satisfy an important need, and (d) the desire to satisfy the need is strong enough to make the effort worthwhile (Vroom, 1964). Focusing on how leaders assess and act upon follower needs for personal rewards is the foundation of path-goal theory.

Path-Goal Theory Definition and Explanation

Path-goal theory posits that leaders will be effective to the extent that leaders can enhance the context in which followers work by clarifying cognitive challenges to help followers achieve goals (House, 1996). The theory began with an assertion that "the motivational function of the leader consists of increasing personal payoffs to subordinates for work-goal attainment and making the path to these payoffs easier to travel by clarifying it, reducing roadblocks and pitfalls, and increasing the opportunities for personal satisfaction en route" (House, 1971, p. 324). Later, House and Mitchell (1974) advanced two general propositions, one being that "leader behavior is acceptable and satisfying to subordinates to the extent that the subordinates see such behavior as either an immediate source of satisfaction or instrumental to future satisfaction" (p. 84), and the

next is that “leader behavior is motivational, i.e., increases effort, to the extent that (1) such behavior makes satisfaction of subordinate's needs contingent on effective performance and (2) such behavior complements the environment of subordinates by providing coaching, guidance, support and rewards necessary for effective performance” (p. 84).

House reexamined the theory in 1996 and articulated that the very foundation of path-goal theory is that leaders in positions of authority will be effective to the extent that they complement the environment of their followers or subordinates; path-goal leaders do this by providing appropriate cognitive clarifications to attain work goals and experience intrinsic satisfaction. The essential notion underlying the path-goal theory is that individuals in positions of authority, superiors, will be effective to the extent that they complement the environment in which their subordinates work by providing the necessary cognitive clarifications to ensure that subordinates expect that they can attain work goals and that they will experience intrinsic satisfaction and recognize the value of their goal attainment. House (1996) emphasized that the function of the leader is to make clear the linkage between followers’ effort and goal attainment as well as between goal attainment and extrinsic rewards. If the followers do not see these connections, House emphasized that the leader must clarify the followers’ perceptions. Further, if followers lack resources essential for goal attainment, the leader must provide needed resources (House, 1996); Jermier (1996) posited that the most important facet of path-goal theory is that the motivational behavior of the leader is measured by the extent leaders complement the work environment and provides what is lacking. Succinctly, “leaders are justified in

their roles by being instrumental to the performance and satisfaction of subordinates" (House, 1996, para. 13).

Path-goal leadership denies the existence of a single leadership pattern for all situations (Alanazi et al., 2013). According to Jermier (1996), path-goal theory was distinguished among other theories in that it went beyond task and relationship-oriented leader behavior to include both participative and achievement-oriented behaviors. Importantly, path-goal leadership is a dyadic relationship, which focused on the individual acceptance of leaders rather than group uniformity (House, 1971; Jermier, 1996). Additionally, path-goal leadership added a complexity to the understanding of the many variables at play when studying leadership (Jermier, 1996). House (1996) explained that path-goal leaders create connections between effort and goal attainment and "engage in behaviors that complement subordinates' environments and abilities in a manner that compensates for deficiencies" (p. 335), or as Northouse (2019) explained, path-goal leaders help followers along a path to success by choosing fitting behaviors and increasing "expectations for success and satisfaction" (p. 118). Northouse (2019) delineated four ways path-goal leaders assist followers in achieving goals: defining goals, clarifying the path, removing obstacles, and providing support.

Path-Goal Leader Behaviors

The behaviors that facilitate this path-to-goal scenario depend upon the work environment and followers, but of these many factors, "the behavior of the supervisor can be one of the most potent" (Evans, 1970, p. 96). The supervisory power will have an impact upon worker behavior and satisfaction if the followers perceive the leader behavior as relevant to the goal and leader behavior is related to follower satisfaction and

performance (Evans, 1970). Thus path-goal leaders must appreciate and assess all relevant variables before deciding which leadership behaviors are required (Bickle, 2017). In 1974, House and Mitchell defined four kinds of path-goal leadership behaviors, and in 2019, Northouse elaborated on each as well:

1. Directive Leadership: House and Mitchell (1974) defined directive behavior as clarifying for followers, making expectations clear, scheduling and coordinating work, offering guidance, and clarifying policies, rules, and procedures. Northouse (2019) stated, "It is thought that by providing explicit expectations and removing ambiguity, followers will have the clarity needed to focus on their jobs" (p. 120). A directive leader is one who not only sets precise standards of performance, but also elucidates regulations (Northouse, 2019).
2. Supportive Leadership: Supportive behavior aims to lead by creating a friendly and supportive environment (House & Mitchell, 1974) by being a friendly and approachable leader (Northouse, 2019). A warm and supportive leader will make work pleasant for followers, and so workers will have the confidence to succeed (House, 1971). Northouse (2019) pointed out that "supportive leaders treat followers as equals and give them respect for their status" (p. 120). Supportive leadership has a stronger effect when the task is very tedious, dangerous, and stressful. In this situation supportive leadership increases subordinate confidence, effort, and satisfaction" (Yukl, 2002, p. 164).
3. Participative Leadership: Participative leadership behaviors include encouragement of follower influence and sharing in decision making (House & Mitchell, 1971; Northouse, 2019). The desired effects of participatory leadership include making the

path-goal relationships plain, emphasizing the parallel between follower goals and larger organizational goals, increasing follower autonomy, and intensifying the social pressure to be active and dedicated followers.

4. Achievement-Oriented Leadership: Achievement-oriented behavior challenges followers to perform excellently (House & Mitchell, 1974; Northouse, 2019). Achievement- oriented leaders behave in a way that inspires follower confidence and has the effect of followers believing they can meet challenging goals (House & Mitchell, 1974).

In 1996, House added to the original four leadership behaviors:

5. Work Facilitation: House (1996) listed a myriad of leader behaviors that facilitate work, including planning, scheduling, and organizing work; personally coordinating the work of subordinates; providing mentoring, developmental experiences, guidance, coaching, counseling and feedback to assist subordinates in developing the knowledge and skills required to meet expectancies and performance standards; reducing obstacles to effective performance of subordinates by eliminating roadblocks, bottlenecks, providing resources; and authorizing subordinates to take actions and make decisions necessary to perform effectively. House (1996) specified that as the leader addresses all of these facets of work, "conditions of uncertainty and unpredictability require a personal rather than a formal planned coordination of work" ("Work Facilitation" section).
6. Group-Oriented Decision Process: This leader behavior deals with the way decisions that affect the group are made, and is connected to participative leadership (House, 1996). The group decision process includes behaviors such as posing problems, not

solutions to the group, and encouraging balanced discussion and participation in goal attainment (House, 1996).

7. Representation and Networking: Leaders must represent their group in a positive light that legitimizes the group in the eyes of others; otherwise work units will not have the ability to procure needed resources (House, 1996). Paired with representation is networking, which enhances representation by maintaining positive relationships with influential individuals outside the group (House, 1996).
8. Value Based Leadership Behavior: According to House (1996), value-based leader behaviors include focus on leaders who accomplish extraordinary follower commitment, identification with leader or organizational goals, and performance above and beyond the call of duty" ("Value Based Leader Behavior" section). Value characteristics include behaviors such as articulation of a vision, display of passion for the vision, demonstration of self-confidence, encouraging even unconscious motives, taking risks, setting high expectations, use of symbolic behaviors, and maintaining positivity (House, 1996).
9. Dixon and Hart (2010) highlighted such flexible behaviors for path-goal leaders as clarification, direction, structure, and rewards. The various leadership behaviors are sources of influence on followers that can affect attitudes, motivation, and behavior (Malik et al., 2014). In order to act with the most efficacy, leaders must continually clarify: "Subordinates will perform better when they have clear and accurate role expectations, they perceive that a high level of effort is necessary to attain task objectives, they are optimistic that it is possible to achieve the task objectives, and

they perceive that high performance will result in beneficial outcomes" (Yukl, 2002, p. 164).

Path-Goal Follower Characteristics

Since leadership behaviors depend upon both situation and follower characteristics, path-goal theory considers multiple facets of follower characteristics. Olowoselu et al. (2019) emphasized that the characteristics of the followers and their tasks are just as important as the behaviors of leaders; therefore, leaders must have an astute perception of follower traits. For example, followers with strong needs for affiliation, "prefer supportive leadership because friendly and concerned leadership is a source of satisfaction" (Northouse, 2019, p. 121). If followers are unsure about how to accomplish a task because it is complex or unfamiliar, the leaders should be more task-oriented (Yukl, 2002); therefore, followers who desire structure in the face of uncertainty, or those with an external locus of control the path-goal directive behavior is appropriate (Northouse, 2019; Olowoselu, 2019). Followers with an internal locus of control, however, would be reached best with the path-goal participative behavior (Northouse, 2019). Northouse (2019) noted that "as followers' perceptions of their abilities and competence goes up, the need for directive leadership goes down" (pp. 121-122); the dynamic nature of leaders and followers emphasizes the need for continual and careful attention by the leader toward followers. Overall, the main objective of the leader is to read the situation, i.e., the work environment of the subordinates (Alanazi et al., 2013), and provide guidance and support for followers to achieve the follower goals as well as the organization's goals by "directing, guiding, and coaching" followers along the path (Northouse, 2019, p. 124).

Path-Goal Framework for the Study

This study utilized the path-goal framework to investigate how teachers act as path-goal leaders in the classroom. The primary focus of the study is on both the teacher-leader behaviors, or styles, and the teacher-leader objectives, or motivating factors: 1) Teacher-leader behaviors: directive, supportive, participatory, achievement-oriented, and 2) Teacher-leader goals: define goals, clarify path, remove obstacles, provide support (House & Mitchell, 1974; Northouse, 2019). Ultimately, this study aims to use the framework to arrive at a better understanding of the dynamic relationship between teacher and students as well as uncover efficacious teaching strategies to assist teachers in clearing the path on the road to learning.

Path-Goal Theory in the Classroom

For decades researchers and leaders have examined path-goal theory in terms of leaders and employees. There is a parallel, however, in the dyad between teachers and students. This framing, of educator as leader and students as followers, is especially relevant in the study. Research conducted in 1990 by Baker et al. investigated a community college that encompassed 869 instructors and over 3000 students. Researchers considered teachers as path-goal leaders, and the researchers defined leadership as "the process of influencing the activities of an organized group toward goal achievement and goal attainment...the process of influencing groups of students to achieve learning" (p. 26). Further, parsing out what long-term effectiveness looks like for teachers, Baker et al. (1990) stated that "teachers need to develop skills in dealing with their students by understanding their behavior, by understanding the dynamics of change on existing situations, and by accepting responsibility for influencing the behavior of

students in accomplishing tasks and reaching goals" (pp. 7-8). Communicating what teacher goals are in a broad sense, Baker et al. (1990) explained that the "teacher's leadership ability--which adds motivational, intellectual, and interpersonal dimensions to their teaching goals--guide the teacher toward his or her central role of teaching the learner how to learn" (pp. 10-11). Although this relationship between teacher and students is different from leader and employee, Baker et al. (1990) defined the role of a teacher as motivator, "a leader in the classroom who engages and arouses students' needs, who clarifies paths and expectations, who reduces barriers to success, and who increases pay-offs and satisfaction," and Baker et al. (1990) defined teaching as "a dynamic and interpersonal relationship in which knowledge and skills are conveyed through mutually held goals and are delivered through the processes of motivation and influence" (p. 11). Thus, though the payoffs do not include monetary reward, as is this case in most leader/employee relationships, Baker et al. clearly illustrated the analogous environment of the classroom to the business room.

Baker et al. specifically connected the educational setting to path-goal theory by explaining that "the teaching-learning concept refers to the relationship between teachers and students in the learning experience; the concept of the path implies both direction and a dynamic, bringing to mind the journey that individuals must take to achieve their potential; and finally, the term goal is intrinsically tied to the concept of path--the path points the way to the goal, and the goal is the achievement of educational objectives" (p. 92). The study presents the same controlling metaphor of the path, or journey to education objectives.

As established in the very foundation of path-goal leadership theory, Vroom's (1964) expectancy theory relates to an essential component of the teacher-student relationship, the ability of teachers to motivate students. Again, in alignment with path-goal theory, Baker et al. implied that teachers as leaders motivate students with their leadership behaviors to the extent that these teacher behaviors influence the path and the goal attractiveness. More specifically, Baker et al. adapted path-goal behaviors to form a teaching-learning path-goal framework; the behaviors delineated were

> recognizing and engaging students' desire to learn; increasing the opportunities for quality educational performance and success in college; offering positive guidance and direction toward goals through coaching; working to eliminate or at least reduce obstacles to learning; motivating students toward increased satisfaction for and development of learning skills; and helping to clarify learning goals and empowering students to achieve active learning contingent on effective performance. (p. 93)

These behaviors align with House's (1971) assertion that "the motivational function of the leader consists of increasing personal payoffs to subordinates for work-goal attainment and making the path to these payoffs easier to travel by clarifying it, reducing roadblocks and pitfalls, and increasing the opportunities for personal satisfaction en route" (324). The study used these functions as well as the functions outlined by Northouse (2019): "Leadership...motivates when it makes the path to the goal clear and easy to travel through coaching and direction, removing obstacles and roadblocks to attaining the goal, and making the work itself more personally satisfying" (p. 118).

Also, especially relevant to the study is the label of "pathfinder" for teacher, as defined by Baker et al. (1990) who stated that a teacher is a pathfinder who "recognizes in students, semester after semester and course by course, the potential that will lead them to the path of their own understanding through shared interaction (p. 95). This supportive role of teacher aligns with supportive leader behavior as outlined by House (1971;1996) that calls for support that leads to increased follower confidence. Further, Baker et al. (1990) offered a distinguishing characteristic of excellent teachers is that they help students recognize their own educational goals; they can alter the student focus from outside to inside, encouraging the student to initiate their own learning. This phenomenon echoes path-goal leader behaviors such as work facilitation, as outlined by House (1996), and achievement-oriented leadership, which challenges followers to perform excellently (House & Mitchell, 1974; Northouse, 2019). To synthesize these ideas, Baker et al. (1990) emphasized that teachers, as path-goal leaders, must clarify expectations, and "the more the instructor is able to clarify, the more likely students are able to become active agents in their own learning--this is the process of empowering students, a role teachers as leaders are cultivating from the very onset of their relation to students. Student empowerment is the path that transforms the follower into the leader, and it is best demonstrated through the strategies teachers employ to help students recognize their possibilities" (p. 100).

Baker et al. (1990) adapted the path-goal leadership behaviors into teacher behaviors, which were guided by motivation and influence, and labeled them as:

- "Recognize and engage student desires to learn
- offer guidance and direction through coaching

- help clarify learning goal paths
- work to limit learning obstacles
- increase opportunities for educational success, and
- empower students toward active learning" (p. 96).

Baker et al. (1990) arrived at these concepts through their analysis of data from both instructors and students. The students were prompted to offer evaluations of their instructors based upon actions and characteristics of instructors that resulted in motivation to learn. An important finding in this data analysis was that "often the teacher must initially recognize limitations that prevent students from articulating their goals or verbalizing their needs in a class" (p. 96). If this finding came from a study in a community college, it is logical to imagine that this student limitation would be even more prominent in a high school classroom.

Another important dynamic that the Baker et al. (1990) study emphasized was the bond between teacher and student and the acknowledgement that teachers and learners share in the responsibility of learning. Also studying higher education, Schneider et al. (1983) found that effective teaching was less about the teacher displaying knowledge and more about communicating why the learning matters and instilling an appreciation for students' own "resource of disciplined inquiry and analysis" and that it "could enlarge the students' own spheres of competence, perspective, and insight" (p. 4). To address the barriers path-goal theory proposes leaders eliminate, Baker et al. (1990) proposed that teachers make accommodations for students and address their needs by "negotiating learning activities, and by encouraging the formation of peer-learning networks" (p. 101). Baker et al. (1990) created a Teaching-Leading Path-Goal Framework (Table 1) that lists

teacher attributes corresponding to various motivational themes; one especially relevant entry explains that a teacher leader who offers positive orientation, guidance and direction through coaching "demonstrates well-defined course organization, identifies and communicates expectations, matches student needs with a plan, encourages student effort with feedback, repeats goals and objectives of course and learning, and identifies and affirms student responsibilities" (p. 103). These attributes align with the tenets of the path-goal theory, and the complete Table 1 offers a thorough list of educational path-goal attributes.

Considering teacher attributes that align with path-goal leaders will remain essential in the framework of the study. The many attributes and their corresponding theme in Table 1 will offer a representation of ways teachers are path-goal leaders in the classroom. This study is needed for two distinct reasons: First, the Baker et al. (1990) study was complex and thorough, but further investigation is needed now thirty years later to provide a more recent and relevant picture of the dynamics of a classroom, and secondly, there is an absence of research focused on path-goal analysis of teachers in high schools. Therefore, the study sought to provide a more current picture of what makes excellent path-goal teacher-leaders in the high school setting. Finally, the current study aims to arrive at not only a list of teacher-leader behaviors but also an offering of specific strategies to facilitate leading students down a path to learning.

Table 1

Teacher-Leading Path-Goal Framework

Theme	Attributes
Recognizes and Engages Student Desire to Learn	Diagnoses student needs Communicates goal and purpose of instruction Provides for student input Aware of total student
Increases Opportunities for quality Educational Performance and Success	Has educational philosophy Sees learning as valuable activity Relates course to experiences Is a facilitator of learning; helps student learning process Encourages belief in student self-worth Finds satisfaction in student achievement Allows student to take responsibility for learning
Offers Positive Orientation, Guidance, and Direction Through Coaching	Demonstrates well-defined course organization Identifies and communicates expectations Matches student needs with plan Encourages student effort with feedback Repeats goals and objectives to course and learning Identifies and affirms student responsibilities
Uses Effective Performance as an Expectation by Which to Empower Student	Sets and upholds standards of behavior Models expected behavior Clarifies expectations and performances for outcomes Teaches student consequences of actions Provides appropriate feedback Accepts and empowers student
Works to Limit or Eliminate Learning Obstacles	Assesses and resolves problems individually Listens with open, receptive attitude Explores alternatives for change Develops and modifies curriculum to meet needs Maintains supportive communication Sensitive to student perceptions Maintain supportive classroom environment Meets with student outside of classroom Provides extra help Encourages use of support and resource services Uses peer and other tutoring
Motivates Student to Increased Satisfaction for and Development of Learning Skills	Motivates student toward greater involvement Considers student to be adult; capitalizes on student experience Promotes trust and respect Encourages independent thinking and risk-taking Encourages maturation as a goal of education

Note: This table is the author's construct based on Baker et al. (1990).

Clearing the Path for Students: Facilitating Deep Work in the Classroom

Clearing the path to learning in a high school setting means finding ways to eliminate the many obstacles impeding the progress toward learning. These barriers can be categorized as electronic distractions in the form of irrelevant activities, such as social media, games, non-school videos/movies; overloaded class schedules, where it is not uncommon for students to carry eight courses in a single semester; and common instructional practices that undermine student success. These problems are often addressed by creating initiatives and programs that are separate from the existing classroom experiences for students. Addressing these issues by only creating structural changes in the school day will not sufficiently address all the barriers to learning.

Schools need more information on how teachers can personally address distractions, students overwhelmed with course loads, and inefficient instructional practices. The study focused on uncovering methods for clearing the path, the aim of path-goal theory, by supplementing the framework with a concept that facilitates productivity: deep work. One way to acknowledge the wisdom of path-goal theory is to focus on how clearing the mental clutter of distractions can lead to a clearer path to learning. This goal of removing the obstacles of distraction can be achieved through teacher-leaders fostering an ability for deep work from students.

The Deep Work of Deliberate Practice

In his 2016 book *Deep Work: Rules for Focused Success in a Distracted World*, Cal Newport defined deep work as "professional activities performed in a state of distraction-free concentration that push your cognitive capabilities to their limit. The efforts create new value, improve your skill, and are hard to replicate" (p. 3). Newport

(2016) uses this term in a business context, but the concept of focused attention certainly applies to the classroom environment as well. Literature on this concept dates back to the 1980s when cognitive load theory (CLT) was introduced, and cognitive load theory is specifically connected to the learning process. Sweller et al. (2019) stated that cognitive load theory "aims to explain how the information processing load induced by learning tasks can affect students' ability to process new information and to construct knowledge in long-term memory" (pp. 261-262). Sweller et al. (2019) explained that CLT has always been intended to provide practical applications. "Cognitive load is increased when unnecessary demands are imposed on the cognitive system. If cognitive load becomes too high, it hampers learning and transfer. Such demands include inadequate instructional methods to educate students about a subject as well as unnecessary distractions of the environment" (p. 262). Here is where Newport's (2016) term of *deep work* overlaps: eliminating distractions will free up paths to cognitive growth.

Deep work is the very essence of deliberate practice. Deliberate practice is different from simply time scheduled to practice or required repetitions of a task or activity; it is distinguished by being both "purposeful and systematic" (Clear, n. d., "What is Deliberate Practice?" section). Further, Ericsson et al. (2007) distinguished deliberate practice as practice that is specific, and focused on something a person cannot do well, or even at all. Hattie (2009), whose research is foundational to Missouri Learning standards, emphasized how essential deliberate attention is to authentic learning. Newport (2016) offered two distinct requirements for deliberate practice: "your attention is focused tightly on a specific skill you're trying to improve or an idea you're trying to master 2) you receive feedback so you can correct your approach to keep your

attention exactly where it's most productive" (p. 35). Newport (2016) also emphasized that "deliberate practice cannot exist alongside distraction" (p. 35).

According to Fawcett et al. (2020), a deliberate-practice pedagogy does transfer to the classroom. The Fawcett et al. (2020) research focused on post-secondary learning; however, many facets of the study could inform secondary teaching, such as incentivizing daily preparation, providing more feedback, emphasizing class contribution/participation, student "after-action reports" (p. 186). Deliberate practice in the classroom means facilitating extended engagement. Constantly re-reading or re-exposing learners to the same material will not translate to memory. Instead, according to Bjork and Bjork (2011), "learning requires an active process of interpretation--that is mapping new things we are trying to learn onto what we already know" (p. 62). Learners are not good at regulating their learning (Bjork et al., 2013), one reason being if students engage in deliberate practice, they will be forced out of their comfort zones (Ericsson & Pool, 2016), which is why a teacher-leader is essential in cultivating the deliberate practice on the path to learning. Even when studying subjects who aspire to expertise, Ericsson et al. (2007) insisted that the role of coaches and mentors is essential. Deliberate practice needs coaching along the way to provide constructive feedback (Ericsson et al., 2007).

Facilitating and monitoring deliberate practice poses a challenge in the high school classroom because focused attention is finite, the school day is long, students have varying degrees of interest. Often, the long school day in high school results in an extended period of shallow work. This "common habit of working in a state of semi-distraction is potentially devastating to...performance" (Newport, 2016, p. 43). The study aimed to find out what strategies teachers use that foster deliberate practice in their

classrooms. One strategy offered by Rutherford (2020) is "slowing learners down and introducing the possibility for mistakes can actually help them in the long run" (p. 67). If teachers want to intentionally create spaces for learning, instruction and tasks must create varied stored-memory associations and retrieval cues.

Rutherford (2020) specified that these "cues often involve[e] situations that are uncomfortable or displeasurable to the learning, including mistakes, slow gains or self-guided learning" (p. 67). These mistakes don't feel rewarding at the moment, however, so students may not realize the learning taking place. Learners can easily be misled about their own learning because of subjective impressions (Bjork & Bjork, 2011). This idea is supported by Fawcett et al. (2020) who acknowledged that deliberate practice for students includes students hitting a perceived limit and prolonged frustration. Another reason the deep work of deliberate practice is difficult to facilitate is that it is "old-fashioned and nontechnological" because deep work "requires the rejection of much of what is new and high-tech" (Newport, 2016). With the ubiquity of screen devices in an average high school classroom, this deep work goal is prodigious.

Distraction as a Problem of Practice

Student addiction to their phones is a significant problem. The *International Journal of Preventive Medicine* even advised that "authorities and cultural institutions have a duty of providing healthy and proper usage of the internet to individuals, especially adolescents who are most vulnerable" (Alavi et al., 2012, p. 293). Research has shown students show addiction symptoms such as compulsion to send and receive messages and the illusion of vibration and the fear of losing phones (Adamczyk et al., 2017). It is faulty for educators to assume students are using phones during class as a

learning tool, especially when schools provide a working Chromebook with internet (Kraushaar & Novak, 2010. We must acknowledge the abundance of time teens are on their phones. Twenge (2017) breaks down cell phone use for the average student: "high school seniors spent an average of 2.25 hours a day texting on their cellphones, about 2 hours a day on the Internet, 1.5 hours a day on electronic gaming, and about a half hour on video chat" (pp. 51-52). Common Sense Media reported in 2015 that teens use media an average of nine hours a day, and Pew Research asserted that up to 45% of teenagers are online "on a near constant basis" (Jiang, 2018).

Teens themselves view too much screen time as a problem, including 60% who say it is a "*major* problem," along with 72% of parents who "feel their teen is at least sometimes distracted by their cell phone when they are trying to have a conversation with them" (Jiang, 2018). Teens are not so self-reflective and open to self-improvement in the reality of a classroom. When students get bored or challenged, it is too easy for them to reach for their phone to ease the discomfort of their mind. They do this because they are in the habit of doing it, the phone gives their brain a jolt of dopamine, and they are convinced they can multitask. Two-thirds of teens don't think watching TV or texting while doing school work interferes with their learning (Common Sense Media, 2015).

Neiterman and Zaza (2019) recently surveyed 478 undergraduate students and 36 instructors at the University of Waterloo. Researchers found that instructors perceived off-task use of technology as "especially problematic, both because it created distractions for other students and because it signified the students' lack of self-control" (p. 8). The survey showed that the use of social media in a classroom had become normalized, and most students saw it as their right to use technology in class (Neiterman & Zaza, 2019).

Some students claimed that the instructor should be so engaging that students would not wish to use off-task technology; however, while many instructors acknowledged an effort to be more engaging, some said that simply that the prospect of being as entertaining as off-task technology is impossible. Another study by Tindell and Bohlander (2021) found that 95% of college students brought their smartphones to class, 92% used phones for personal purposes during lessons, and 10% used phones to cheat during exams. The study revealed more about this topic in a high school setting.

Research shows cognitive multitasking is a persistent myth (Christensen, 2020; Mautz, 2017; Qian & Li, 2017; Rosen, 2008), even though multitasking is a commonly used strategy students erroneously believe is helpful (Duncan et al., 2012; Jiang, 2018). It's not a solution, and device distraction is an issue in high school as well as in the college classroom (Cheong et al., 2016), and divided attention in the classroom has been shown to reduce exam performance and impaired long-term retention of teacher lessons (Glass & Kang, 2019). Trying to accomplish two thinking tasks simultaneously cannot be done. Instead, attention is quickly switched from one task to another. Leroy (2009) studied the phenomenon of task-switching and found that "the act of transitioning between tasks has implications on how people engage in a subsequent task; switching attention tends to be difficult for people and subsequent task performance easily suffers" (p. 178). Leroy (2016) calls the mental lag a person experiences when attempting to give attention to a next task is *attention residue*, which slows down productivity. In other words, attention residue "reflects the persistence of cognitive activity about a Task A even though one stopped working on Task A and currently performs a Task B" (p. 169).

The concept of attention residue is especially relevant to students in high school who are required to switch not only multiple tasks a day but also entirely different subjects. Further, Leroy and Schmidt (2016) later continued the residue research and found that the impediment of residue can be somewhat manipulated with framing; managers can assist employees by providing direction and guiding priorities of multiple tasks. Here is where the current study can contribute to a study of teaching strategies that not only prioritize careful focus but also consider ways to frame the executive function of assisting students in prioritizing tasks.

Teaching Methods for Facilitating Student Focus

Research shows that to reduce off-task behavior, teachers must involve students by having close interactions that make learning relevant (Conderman et al., 2000; Koszewski, 1994; Qian & Li, 2017). Research is needed to find out more about how students behave, feel, and think about school engagement and how teachers can increase engagement (Fredricks et al., 2004; Keyes, 2019). My research will contribute to this need. All teachers, including professors, are forced to deal with students who need assistance in overcoming barriers to learning such as distractions and a sense of being overwhelmed with tasks. Thus, the current study will take the path-goal leadership framework priorities of ensuring goals are clear, communicating the value of the work, clearing the path, and providing guidance, and investigate meeting these priorities through the lens of deep work.

Ericsson and Krampe (1993) established the need for guided practice and increasingly longer deliberate practice sessions, just as an athlete works harder to attain superior athletic skills. Ericsson and Krampe also found “no support for fixed innate

characteristics that would correspond to general or specific natural ability" (p. 399). Further, their research recognized that "being told by parents and teachers that [students] are talented...most likely increases motivation, boosts self-confidence, and protects young performers against doubts about eventual success" while in the stress of learning (p. 399). If teachers in the classroom can guide students to acquiring stamina to maintain deliberate practice, students will have a better chance of academic success. Assisting students in making gains regarding their mental endurance is a challenging and complex task, especially considering the length of the school day and the limited hours students can maintain extreme focus, which for a complete novice, could be one hour a day, and for high-performers, the limit is near four hours (Ericson & Krampe, 2007; Newport, 2016). A workday, therefore, must have a shrewd mix of both shallow and deep work.

Newport (2016) suggested two especially relevant guidelines that could potentially translate to helpful advice for teacher-leaders who are creating a map for student learning: schedule every minute of the day, and quantify the depth of every activity, keeping in mind what Hari (2022) noted: depth takes time and reflection. The objective of the phenomenological study is to see the reality of leading high school students as a path-goal leader who emphasizes deliberate practice along the path to learning. In this process, the study will glean various efficacious teaching methods that contribute to both the study of leadership and learning as well as the practice of teaching.

Summary

Path-goal leadership theory is rooted in the study of leaders and employee followers; however, the well-established leadership theory lends itself well to the teacher-student dyad. Some research has been done into teachers as path-goal leaders, including a

thorough study of higher-education instructors and students by Baker et al. (1990) who clearly illustrated how the classroom is analogous to the business environment. Specifically, the classroom setting requires a path that points the way to goals of educational objectives. Baker et al. (1990) adapted path-goal leadership behaviors into teacher behaviors, which were "guided by motivation and influence" (p. 96). The study acknowledged the study by Baker et al. (1990) and built upon the knowledge by both recognizing the high school classroom and offering a more current view of the teacher as a path-goal leader.

The contemporary classroom is an environment that offers even more distractions than classrooms before widespread use of cellphones and laptops. Thus, a unique focus of this study will be the ways teachers as path-goal leaders clear the path to learning by managing the mental distractions that are obstacles to learning. The methods for facilitating serious focus, or deep work, include coaching students in deliberate practice, which cannot coexist with distraction (Newport, 2016). Deliberate practice must be scheduled and coached so that students can follow the path to learning goals. The study is needed because the problem of reaching all students of varying skill levels remains a priority for educators, especially considering increasingly diverse classrooms and entertaining technological distractions. Thus, the study contributes to the study of leadership at the classroom level for secondary teachers, ultimately discovering ways those teacher-leaders can clear the path to learning around many learner obstacles.

SECTION FOUR: CONTRIBUTION TO PRACTICE

To be presented to Glendale High School faculty in fall of 2022

Executive Summary

Teachers are both cartographers and navigators…

A teacher must survey the landscape for learning and create a map to success before students begin their journeys. Having a map for success is only the beginning. Teachers must be path-goal leaders who meet motivational needs, pathfinders who can forge various paths to success.

Rationale:

Since current research rejects a single way to lead students to academic goals, and researchers report the efficacy of differentiated instruction, and students attending to digital tasks has become a normalized activity, despite research stating cognitive multitasking is a myth, the present study is needed to combine differentiated instruction and facilitated focus skills for students.

Framework #1: Path-Goal Theory	**Framework #2: Cognitive Load Theory**
Teachers will be effective to the extent that they complement the environment in which their students work by providing cognitive clarifications. Priorities are 1) define goals 2) clarify path 3) remove obstacles 4) provide support	Aims to explain how the information processing load induced by learning tasks can affect students' ability to process and retain new information. Note: If unnecessary demands are imposed on the cognitive system, learning decreases.

Path-Goal + Cognitive Load = leaders enhancing the context in which followers work by clarifying cognitive challenges by eliminating distraction and facilitating **deep work**

Research Question:	**Design of Qualitative Study:**
How do teachers facilitate deep work to lead students to goals by maintaining the priorities of 1) defining goals 2) clarifying the path 3) removing obstacles 4) providing support?	Data collected from Glendale High School 6 teachers (focus group, interviews, artifacts), 2 assistant principals (interview), and 10 students (interviews)

Findings

Behaviors of the Path-Goal Teacher-Leader	**Teacher-Leader Behaviors and Decisions to Facilitate Deep Work**
Directive: • Make expectations clear • Repeat expectations in more than one way • Clarify policies, rules, and procedures for all students	• Do not require expectations, policies, rules, and procedures to be memorized; instead display clearly and repeat often • Insist on a space that is distraction-free when teaching complex material

"Be prepared to repeat information. Give more directive commands. Some students need to be reinforced individually because they lack the confidence to simply get started." -Teacher Leader

Supportive: • Create a friendly environment • Treat followers with respect • Model expected behavior • Listen with receptive attitude	• Consider stress of other courses and student life outside of classroom • Create a dependable daily schedule • Create environment that allows for deep work

"Set the tone by being serious and modeling quality work." -Teacher Leader

Cont. Executive Summary

Participative: • Share in some decision making • Make the path-goal relationship plain • Create student choice when appropriate • Create interactive discussion and dialogue • Intentionally encourage engagement	• Provide guidance when students have choice; do not let the confusion of options overtake the goal of learning • Facilitate discussion and dialogue by teaching students how to participate • Model deliberate practice
"My classroom is a constant conversation." -Teacher Leader	
Achievement-Oriented: • Diagnose student needs; adapt • Set reachable, challenging learning goals • Empower students • Allow student to take responsibility for learning • Encourage student self-worth	• Meet students where they are so that their minds are neither overwhelmed nor bored • Empower students with the understanding of the efficacy of deep work so that they can reap the benefits • Practice and build deep work skills so that students can become better
"Teachers must create buy-in and interest to give the middle group of achievers a boost." -AP	
Work Facilitation: • Plan ahead • Provide a map to success • Schedule every moment of the class period; chunking • Provide frequent and apt feedback • Resolve problems • Allow mistakes • Provide extra help/ resources • Lead despite surprises and uncertainty	• Provide clear maps for students so that they can anticipate tasks and know why their attention is required • Structure time for shallow and deep work; students should anticipate when deliberate practice is required • Make schedule simple enough to reduce attention residue • Assess learners in order to meet them where they can take action
"Effective teachers revisit details and have checkpoints, which are posted in places where kids can find them." -Assistant Principal	
Value-Based: • Create a safe environment for all students • Insist on kindness and respect for all • Show students passion for learning • Maintain honesty and integrity	• Slow down to get to know students to develop a personal relationship; use humor • See whole student • Make students comfortable so they can concentrate
"If you care first, you can teach more intensely after." -Teacher Leader *"Good relationships help lead students down paths to learning—plus good lesson planning and classroom procedure, equals enriching opportunities."* -Assistant Principal	

Cont. Executive Summary

Synthesis:

Effective teachers…

- carefully consider the task of planning, or map making
- create a continual feedback loop with students
- react to feedback by providing multiple paths to learning
- provide clear, frequent, and direct instruction for requirements and expectations
- contextualize their material by making connections, or entry points with students
- make organizational and instructional decisions that ease cognitive load
- know deliberate attention is essential to authentic learning
- converse and connect with students

Syllabus suggestion for Glendale Teachers:

Using small group collaboration, teachers could fine-tune class syllabi in these areas:

- How assignments will be labeled and where the details will be posted
- The modes student will employ to show they have learned material
- Where resources will be stored or posted for student use throughout the year
- What is the teacher's retake/revision policy for work (with a justification)
- Required or suggested student organizational materials
- Expectations for engagement and attention during and outside of class
- Explanation of grading policies (with justification)
- Statement on how and where students can expect feedback and how they can ask for more

Note: In addition to the paper copy of the executive summary, I will make Teacher Handouts 1 and 2 available via email: Teachers as Path-Goal Leaders: Priorities of the path-Goal Teacher-Leader (Appendix E) and Clearing the Mental Pathway: Cognitive Load theory, Deep Work, and Deliberate Practice (Appendix F).

A Qualitative Study of Teachers as Path-Goal Leaders

Presentation to Glendale High School

by Dr. Keely Scott

Teachers are both cartographers and navigators…

We survey the landscape for learning and create maps for student success. Once the map is made, however, the work has only just begun.

"Over every mountain, there is a path, although it may not be seen from the valley."
— Theodore Roethke

Why is it difficult to create maps for success?

- Our learners are diverse in skills, habits, and attitudes
- Our learners are distracted
- Our learners can't all travel the same path

Therefore, we need to differentiate our instruction and facilitate focusing skills for our students.

95% of US teens say they have access to a smartphone; 45% say they are "almost constantly" on the internet (Shaefer, 2019).

Theoretical Frameworks

Path-Goal	Cognitive Load	Path-Goal + CLT
Examines how leaders enhance the environment by providing cognitive clarifications.	If unnecessary demands are imposed on the cognitive system, learning decreases.	Remove the obstacle of distraction. Deep work = Activities performed in a state of distraction-free concentration.

Deliberate practice is scheduled, sustained deep work.

Conceptual Framework

Question & Sources for Answers

So how do teachers keep these theories in mind as they lead students to learning goals?

- 6 Teacher Leader (TL) participants
  - Focus Group
  - Interviews
  - Artifacts
- 2 Assistant Principal (AP) participants
  - Interview
- 10 student participants
  - Interviews

Directive Behaviors

- Do not require expectations, policies, rules, and procedures to be memorized; instead display clearly and repeat often
- Insist on a space that is distraction-free when teaching complex material

"It's probably better to have a strict teacher that doesn't tolerate non-classroom behavior." -Student

"My number one job is to make my students learners. It's not about memorizing a formula. It's about students persevering and reasoning through a problem. It's about me giving them tools." -TL

Supportive Behaviors

- Consider stress of other courses and student life outside of classroom
- Create a dependable daily schedule
- Create environment that allows for deep work and mistakes

The best teachers let me be like, who I am. They let me be very human. And they interact with me." -Student

"A key piece to goal-setting is having student ownerships with the teacher supporting and giving feedback." -AP

Participative Behaviors

- Provide guidance when students have choice; do not let the confusion of options overtake the goal of learning
- Facilitate discussion and dialogue by teaching students how to participate
- Verbal feedback is preferred

"If there's a conversation, I'm not going to take a step back. If I'm interested in what's being said, I won't get on my phone." -Student

"Great teachers draw upon other students."
-AP

Achievement-Oriented Behaviors

- Meet students where they are
- Empower students with the understanding of the efficacy of work
- Practice and build deep work skills

"You can study educational theory, but until you've been a classroom teacher, you don't understand all the demands, the need to think quickly, to chuck your original plans out the window to meet students where they are." -Teacher Leader

"I love to see the whys behind assignments so I can keep that in mind while I'm doing work. I have no motivation to do pointless filler assignments."
-Student

Work Facilitation Behaviors

- Provide clear maps for students
- Structure time for shallow and deep work; chunking
- Make schedule simple enough to reduce attention residue
- Anticipate how to refocus when students are distracted

"Calling kids up individually is the best way to communicate feedback." -Assistant Principal

"My maps change every year." -Teacher Leader

Value-Based Behaviors

- Slow down enough to get to know students to develop a personal relationship
- See whole student
- Make students comfortable so they can concentrate

"I would estimate 75% of my job is social-emotional learning." -Teacher Leader

"Personal connections make me respect teachers more and want to learn." -Student

"I've gotten better with physics since [the retake], and it's because my teacher understood I wasn't getting it. She could read my expression."
-Tiana

Student Participant	Descriptors for Effective Teachers
Aliyah, grade 11	Adaptable, communicative, willing to learn
Ava, grade 12	Communicator, easy to connect with, organized
Hazel, grade 9	Interactive, patient, understanding
Levi, grade 10	Attentive, best-friend quality, flexible
Nolan, grade 11	Collaborative, hands-on, patient
Nora, grade 11	Easy going, flexible, not stressed
Piper, grade 12	Caring, involved, organized
Riley, grade 11	Communicator, organized, thorough
Sophie, grade 12	Cooperative, friendly, personable
Tiana, grade 9	Generous, open, patient

Discussion & Synthesis

- The data suggest **the most effective way to control student phone use is not rules but rather engagement**. Intentional engagement with students rated absolutely essential by teachers, principals, and students. One TL likened her engagement into a lesson to "wading into deep waters," explaining the practice of starting shallow and getting deeper as students can build working schemas for larger, more complex ideas.

"Dis-engagement comes from a lack of knowledge."
-Teacher Leader

Cultivate collaborative forethought in creating maps.

Provide time and protocols for small groups of teachers to engage in deep conversation about the following sections of their syllabi:

- Consistent labeling
- Modes of communicating learning
- Dependable places to find information
- Retake/Revision policy (with justification)
- Required or suggested student organizational materials
- Expectations for engagement and attention
- Explanation of grading policies (with justification)
- How students can expect feedback

Suggestions for Teacher Growth

SECTION FIVE: CONTRIBUTION TO SCHOLARSHIP

To be submitted to *The Journal of Pedagogical Research*

Abstract

This qualitative phenomenological study investigated teachers as leaders in their classrooms. The study focused on the various ways high school teachers facilitate deep work in their students to lead them to learning goals by examining how teachers define goals, clarify paths, remove obstacles, and provide support to learning. The study acknowledges the current problem of students needing help to overcome learning obstacles such as distraction. The setting of the study was a single high school in the Midwest. Findings from interviews of teachers, principals, and students include a consensus on the importance of controlling the context of the learning environment by clarifying task relevancy and monitoring focus intensity. Findings also showed the importance of the dynamic interplay between teacher and students; continual feedback is necessary to meet student needs. Preferred feedback is verbal, and data showed strong agreement in student engagement in a positive student/teacher relationship as the most effective way to learn and avoid distractions. The implications for practice apply to both teachers and instructive decision-makers in terms of planning and expectations of class organization, management, and content delivery. Future research is needed in how the brain science of cognitive load theory can inform classroom practices.

Key words: maps, cognitive load, path goal, engagement, distraction, relationships, feedback

1. Introduction

"Only connect!" says E.M. Forster in his 1910 novel *Howard's End*, "Live in fragments no longer." This simple directive to find meaning can be interpreted as a Herculean task for a 21st century teacher. Today's teachers must use their broad and studied perspectives to inform their instructional organization for students who are diverse learners. Teachers do not have the power to control many aspects of their environments, from number of students to the bells that segment their days, but teachers can boldly adapt to the context in which they teach. As Drysdale and Gurr (2017) argued for principals to "master the context" (p. 139), so too must teachers take steps to control what they can to facilitate learning for students. Thus, teachers should assess the landscape of their classroom, factoring in what they cannot change as well as what variables they can control when designing instruction. A well-crafted map to success can offer students the perspective they do not have: Showing students the end goal and the many paths to achieve it will help them feel less adrift and helpless. If the teacher as cartographer can offer the complete map, students could connect meaning to clearly defined destinations. If they know the *where* and the *why*, students might make the trek all the way to authentic learning.

1.1 Problem

No matter how complete the map, however, unless the teacher steps down from the balcony and guides on the ground, students will still feel adrift. Thus, the implementation of broader maps to success requires personal connection and guidance from teachers as path-goal leaders, leaders who "meet followers' motivational needs" in a particular setting (Northouse, 2019, p. 117). Meeting student needs is a challenge, but

current research insists that educators cannot lead students to educational goals by using a single method (McBride, 2004; Subban, 2006; Tomlinson, 2000). Instead, teachers must use various approaches, or differentiated instruction (Gumpert & McConell, 2019; Tomlinson & Dockterman, 2002; Wormeli, 2017), which is a student-focused way of thinking about teaching and learning. Differentiated instruction acknowledges the broad range of learners in a classroom and aims to meet all students by adapting various methods. In a post-COVID classroom, a need for reaching various levels of learners is paramount. The COVID-19 pandemic has severely widened the education achievement gap (Anderson, 2020; Meckler et al., 2020; Rothstein, 2020). Rothstein (2020) also pointed out that even beyond the pandemic, the achievement gap continues to widen because of disparities in what students are doing during summer breaks as well as reliance on homework as a means for ensuring learning. Research also suggests that increased personalization in education encourages better academic outcomes (Goodwin, 2017; McClure et al., 2010). Facilitating these multiple approaches and essential personal connections comes from teachers as path-goal leaders in their classrooms.

Student addiction to their phones is a significant problem. The *International Journal of Preventive Medicine* even advised that "authorities and cultural institutions have a duty of providing healthy and proper usage of the internet to individuals, especially adolescents who are most vulnerable" (Alavi et al., 2012, p. 293). Research has shown students show addiction symptoms such as compulsion to send and receive messages and the illusion of vibration and the fear of losing phones (Adamczyk et al., 2017). Educators are naive to assume students are using phones during class as a learning tool, especially when schools provide a working Chromebook with internet. We must

acknowledge the abundance of time teens are on their phones. Twenge (2017) breaks down cell phone use for the average student: “high school seniors spent an average of 2.25 hours a day texting on their cellphones, about 2 hours a day on the Internet, 1.5 hours a day on electronic gaming, and about a half hour on video chat” (pp. 51-52). Common Sense Media reported in 2015 that teens use media an average of nine hours a day, and Pew Research asserted that up to 45% of teenagers are online “on a near constant basis” (Jiang, 2018). Research has demonstrated that students who are allowed cell phones are distracted even by receiving notifications alone (Lee et al., 2021), and even the presence of a cellphone can be distracting (Ward et al., 2017).

Teens themselves view too much screen time as a problem, including 60% who say it is a “*major* problem,” along with 72% of parents who “feel their teen is at least sometimes distracted by their cell phone when they are trying to have a conversation with them” (Jiang, 2018). Teens are not so self-reflective and open to self-improvement in the reality of a classroom. When students get bored or challenged, it is too easy for them to reach for their phone to ease the discomfort of their mind. They do this because they are in the habit of doing it, the phone gives their brain a jolt of dopamine, and they are convinced they can multitask. Two-thirds of teens don’t think watching TV or texting while doing schoolwork interferes with their learning (Common Sense Media, 2015).

Neiterman and Zaza (2019) recently surveyed 478 undergraduate students and 36 instructors at the University of Waterloo. Researchers found that instructors perceived off-task use of technology as “especially problematic, both because it created distractions for other students and because it signified the students’ lack of self-control” (p. 8). The survey showed that the use of social media in a classroom had become normalized, and

most students saw it as their right to use technology in class (Neiterman & Zaza, 2019). Some students claimed that the instructor should be so engaging that students would not wish to use off-task technology; however, while many instructors acknowledged an effort to be more engaging, some said that simply that the prospect of being as entertaining as off-task technology is impossible. Another study by Tindell and Bohlander (2021) found that 95% of college students brought their smartphones to class, 92% used phones for personal purposes during lessons, and 10% used phones to cheat during exams.

Research shows cognitive multitasking is a persistent myth (Christensen, 2020; Mautz, 2017; Qian & Li, 2017; Rosen, 2008), even though multitasking is a commonly used strategy students erroneously believe is helpful (Duncan et al., 2012; Jiang, 2018). It's not a solution, and device distraction is an issue in high school as well as in the college classroom (Cheong et al., 2016), and divided attention in the classroom has been shown to reduce exam performance and impaired long-term retention of teacher lessons (Glass & Kang, 2019). Students with frequent software multitasking on laptops exhibit lower academic performance than students with a low frequency of software multitasking (Kraushaar & Novak, 2010; Lee et al., 2021). Trying to accomplish two thinking tasks simultaneously cannot be done. Instead, attention is quickly switched from one task to another. Leroy (2009) studied the phenomenon of task-switching and found that "the act of transitioning between tasks has implications on how people engage in a subsequent task; switching attention tends to be difficult for people and subsequent task performance easily suffers" (p. 178). Leroy (2009) calls the mental lag a person experiences when attempting to give attention to a next task is *attention residue*, which slows down productivity. In other words, attention residue "reflects the persistence of cognitive

activity about a Task A even though one stopped working on Task A and currently performs a Task B" (p. 169).

The concept of attention residue is especially relevant to students in high school who are required to switch not only multiple tasks a day but also entirely different subjects. Recently, Hari (2022) affirmed that task switching has a cost, both losing focus and increasing errors. Further, Leroy and Schmidt (2016) later continued the residue research and found that the impediment of residue can be somewhat manipulated with framing; managers can assist employees by providing direction and guiding priorities of multiple tasks. Here is where the current study can contribute to a study of teaching strategies that not only prioritize careful focus but also consider ways to frame the executive function of assisting students in prioritizing tasks.

1.2 Context

The audience for this study is secondary teachers, instructional coaches, and principals. The study is relevant in the context of the state standards as well as the site-specific district standards. These standards prioritize basic and higher-order skills, including problem solving and critical thinking for students, and the state and district standards prioritize various relevant teacher quality standards such as making aspects of subject matter meaningful and engaging for all students, and understanding how students learn.

1.2 Setting

The setting of my research and data collection was a high school in the United States Midwest. In 2019, the city had a population of nearly 170, 000. Timberline High School (THS) serves a district with enrollment of close to 25, 000, half of those students

qualify for free and reduced lunch prices. Upper grades in the district are divided into five high schools, and overall, the ACT composite average is 20. THS is a building that serves grades 9-12 and has an average enrollment of approximately 1,400 students. In 2021, the student: teacher ratio was 20:1. Its minority enrollment in 2021 was 13%.

1.3 Purpose and Research Question

This study acknowledged that teachers function in a vast array of schedules, filled with a range of students, and the study proposed that no matter the abilities and structural realities of schools, the most influential factor is the teacher-leader and their instructional methodology. The problem of reaching all students of varying skill levels remains a priority for educators, especially considering increasingly academically diverse classrooms and entertaining technological distractions. Thus, the study contributed to the review of leadership at the classroom level for secondary teachers, ultimately discovering ways those teacher-leaders can clear the path to learning around many learner obstacles. It is also important to note that the approach to combatting the distraction of electronic devices is from the perspective of the teachers, who do not have the power to enact policy change or edit the student handbook. Though research has offered that eliminating cell phones prior to receiving instruction can improve learning (Lee et al., 2017), Lee et al. (2021) acknowledged that implementing a rule to keep cellphones home seems unrealistic in many settings. As the researcher, I did not attempt to gather information for policy change; rather I focused on what teachers do now, in the current context of students being allowed devices in class. The research question driving this study was**,** As perceived by high school teachers, principals, and their students, how do teachers facilitate deep work to lead students to learning goals by maintaining four essential

priorities as outlined by path-goal theory, namely (a) defining goals, (b) clarifying the path, (c) removing obstacles, and (d) providing support?

2. Method

This study was a descriptive study of high school teachers and students in the Midwest. The particular focus was the many behaviors these teachers employ when leading students in their classrooms to various learning objectives; thus, a phenomenological approach was used to arrive at the authentic, subjective experience of teachers. This was done with an element of cooperative participatory action research on the part of the teacher-leader participants. The participatory element of the research design occurred early in the study during the first focus group when the teacher-leader participants conversed with me as the researcher in identifying teacher-leader behaviors that best uphold the priorities of path-goal leadership. This element of participatory action research spurred inquiry to begin my study, which facilitated the phenomenological goal of uncovering the reality of the teacher experiences in the classroom. To arrive at a more complete picture, I also collected data from two principals and ten randomly chosen students. I acknowledge that principals and students do not speak for the subjective point of view of teachers, but their close connection to the teacher-as-leader experience added to the depth of understanding of the phenomenon. Seeing the reality of the many leader behaviors and follower impressions provided a nuanced and authentic story of the many demands on teachers and how they clear paths for student learning.

2.1 Theoretical Frameworks

Path-goal leadership theory is rooted in the study of leaders and employee followers; however, the well-established leadership theory lends itself well to the teacher-student dyad. Some research has been done into teachers as path-goal leaders, including a thorough study of higher-education instructors and students by Baker et al. (1990) who clearly illustrated how the classroom is analogous to the business environment. Specifically, the classroom setting requires a path that points the way to goals of educational objectives. Baker et al. (1990) adapted path-goal leadership behaviors into teacher behaviors, which were "guided by motivation and influence" (p. 96). The study acknowledged the study by Baker et al. (1990) and built upon the knowledge by both recognizing the high school classroom and offering a more current view of the teacher as a path-goal leader.

The contemporary classroom is an environment that offers even more distractions than classrooms before widespread use of cellphones and laptops. Thus, a unique focus of this study will be the ways teachers as path-goal leaders clear the path to learning by managing the mental distractions that are obstacles to learning. This phenomenon is more fully realized by considering cognitive load theory, which is connected to the learning process. Sweller et al. (2019) stated that cognitive load theory explains the processing load for learners and that if too many unnecessary demands are imposed on the cognitive system, students' ability to learn is diminished. The methods for facilitating serious focus, or deep work, include coaching students in deliberate practice, which cannot coexist with distraction (Newport, 2016). Deliberate practice must be scheduled and coached so that students can follow the path to learning goals. The study is needed

because the problem of reaching all students of varying skill levels remains a priority for educators, especially considering increasingly diverse classrooms and entertaining technological distractions. Thus, the study contributes to the review of leadership at the classroom level for secondary teachers, ultimately discovering ways those teacher-leaders can clear the path to learning around many learner obstacles.

2.2 Participants and Data Collection

In this study, to reach the goal of understanding the reality of teachers as leaders in the classroom, I used a purposeful sampling by selecting information-rich cases to yield in-depth research. The purposeful way I selected my teacher participants was by choosing participants who are willing to spend extra time self-reflecting, attending a focus group, and being interviewed. Additionally, to assist me in my initial invitation to teacher-leaders, I had a conversation with the head principal and learning specialist of THS where I asked their advice on creating my purposeful sampling of teacher-leaders in order to arrive at a typical-case sampling with the following criteria: (a) participants are teachers who carry a full load of classes, (b) participants are general education teachers, (c) participants teach high school students, and (d) participants have been evaluated by building principals to be proficient in the craft of teaching/leading students. Additionally, I invited a variety of teachers, making sure to have new and veteran teachers and both core teachers and elective teachers. My goal was to gather an interdisciplinary group, aiming for multivocality, as advised by Tracy (2010).

The pool of teacher leader (TL) participants consisted of six regular education high school teachers. TL Clark is a science teacher who teaches Physics and Health Science, which are both courses required for graduation. TL Clark has been teaching for

nine years, and her other careers include work in refugee resettlement, web design, and barista supervisor. TL Davis is a social studies teacher who teaches various elective government courses. TL Davis practiced law for nine years before becoming a teacher, and she has been teaching eight years. TL Hansen is currently in his first year of teaching. TL Hansen teaches various required English courses and worked in banking before education. Education has been the single career for TL Jones who has been a Spanish teacher for sixteen years. Foreign language courses are electives. TL Monroe has been a math teacher for 21 years, and she currently teaches Algebra, Calculus, and Statistics. Math class are required; however, upper-level courses are considered electives. Finally, TL Nelson is also a math teacher. TL Nelson has been teaching for 22 years, and her current course load include required freshman classes.

My interactions with these teacher leaders began with a 70-minute focus group. The focus group began with a detailed explanation of my study, including the two theoretical frameworks. After the online focus group, seated classes resumed, and I was able to conduct five teacher interviews in person. For the five in-person interviews, I visited the teachers in their own classrooms after school. The last teacher interview with TL Davis was conducted via Zoom. These individual interviews averaged 50 minutes. In addition to these conversations, I also asked each teacher to share with me an artifact, which they gave to me in hard copy or emailed directly to me.

To gain a broad perspective on teachers as leaders, I arranged for an interview with two assistant principals. My motivation for choosing APs was to draw from leaders in a position where they are required to observe and evaluate multiple teachers every year. AP Lewis has five years of experience as a teacher evaluator, and AP Jackson has

seventeen years of experience. Our hour-long conversation happened in a conference room the in main office of the high school. The atmosphere of the interview was relaxed but professional. Both AP participants were open to sharing their observations and experiences in response to interview questions that echoed the teacher interview questions.

The pool of student participants was created by choosing a variety of classes, then asking teachers for students in a random fashion. Specifically, I selected various levels of classes then sent messages to the teachers asking for a random number from their roster. I pulled from grades 9-12, from classes designed for academically struggling students and from academically advanced classes. No student interviewed had ever been enrolled as my student. The participants included two freshmen, Hazel and Tiana; Levi, a sophomore; Nora, Riley, and Nolan who are juniors; and Piper, Ava, and Sophie who are seniors.

2.3 Data Analysis

The data analysis process utilized my own observations, the participants' words, the teacher artifacts, and the theoretical frameworks of path-goal theory and cognitive load theory. The process of arriving at categories was guided by the five criteria for category construction offered by Meriam and Tisdell (2016). First, categories should be responsive to the purpose of the research, meaning for this study, categories had to satisfy the goal of understanding ways teachers lead students along a path to learning and increasing knowledge of strategies that help students overcome obstacles. Second, categories should be exhaustive; thus, the categories should be vast enough to provide a place for all data I deemed relevant. Third, according to Meriam and Tisdell, categories

should be generally mutually exclusive, which means that each unit of data should have a single clear category. Since teaching requires so many strategies and decisions simultaneously, this guiding principle was challenging; it helped to keep in mind that portions of sentences could be divided into multiple categories or subcategories. Next, the categories should be sensitizing; their labels should clearly represent the essence of the phenomenon described within. Finally, the categories should be conceptually congruent; therefore, I tried to match the level of abstraction of each label given to the information.

3. Findings

3.1 Defining Goals

Defining goals is concept that is a priority for path-goal leaders. For a teacher path-goal leader, defining goals is the process of communicating to students what their learning objectives are. It answers the student questions of *What do you want me to learn? Why?* And *What do I have to do?* The defining goals category can be divided into two themes, one being a more task-oriented clarification and the other being the more conceptual idea of overall learning goals and teachers communicating relevancy to students.

3.1.1 Communicating Required Tasks

The foundation of what a teacher does every day is define what students must do. Effectively communicating the many required tasks entails more than creating a to-do list. Teacher leaders shared that communicating requirements to students is a layered process, involving written and oral directions. All student participants communicated that whether online or paper, they appreciate a verbal explanation to go along with it. Student Piper stated that for assignments, she prefers teachers “do a good outline” and “explain

what they expect you to turn in"; here she emphasized this should be done "in person." Student Riley said in Speech and Debate, they offer a "roadmap" at the beginning of speeches, and "that's what the best teachers do, so you know everything you're going to do beforehand." Students Ava, Hazel, and Tiana said they appreciate a "to-do list on the board for the week.

Teacher leaders acknowledged that they must be prepared to repeat directions and expectations, daily and even multiple times during a class period. In terms of communicating requirements and defining goals, AP Jackson began with the succinct answer of "clear and often." More specifically, AP Jackson said "effective teachers really utilize a syllabus from the get-go, letting the kids know immediately an outline of the whole semester or year." In terms of posting an agenda and objectives, Jackson noted that all these targets should be articulated verbally, emphasizing that "communication needs to come in a variety of modalities." Multiple student participants cited "organized" as an important quality for a teacher to have.

TL Nelson communicates requirements to students by immediately modeling what she wants her students to do. And to begin, Nelson explained, she keeps it informal at first and tries to "tell the story." Nelson underscored the common mistakes teachers make of assuming students know what teachers want. Instead, Nelson stated, "Say the instructions out loud. Clearly. Make sure they have a visual of what the expectations are. Make a bulleted list on the board. Then get their attention, their focus." Further, once the attention is gained, Nelson said it is important to begin the first task with them because if you "just toss something at them, they're going to grab the phone or get distracted. So set the tone by being serious and modeling quality work." Additionally, TL Nelson qualified

that during practice work time, she clarifies to the students that the session is practice work, so “it’s okay to struggle and not know what you’re doing the whole time.” If the goal is practice, Nelson explained, there is more motivation to try things they have never done before.

The first idea that came to AP Lewis when asked about defining goals was the importance of adaptation: “It’s not just listing the stuff on the board. It’s more than just that. It’s not just going through step by step. Teachers must have the ability to adapt.” At this point AP Lewis explained that some kids will not be able to follow, because they cannot or because they are disinterested, so that is why the teacher must adjust in the moment. Lewis said adapting as teacher deliver information helps learning as well as classroom management. When elaborating on management and motivation, TL Nelson mentioned that she “collects daily work all the time because with freshmen they’re learning to be a good student. TL Nelson said that awarding points for showing up and participating is necessary “to reach the broad spectrum of kids. Some of those kids just need to be given the opportunity to show that they showed up. They aren’t’ going to make an A unless they can demonstrate genuine learning, but sometimes students receive points for paying attention, which often translates to a D or C. But their presence indicates a level of learning.”

3.1.2 **Communicating Goals and Relevancy**

This theme stood out in the data because it communicated a deeper, conceptual understanding about the true purpose of the teacher leader’s job. Teachers who effectively cultivate individual learning goals and clarify the purpose of all the daily tasks affects student motivation. To communicate relevancy, the teacher must know what is at

the end of the winding path. TL Clark said she has the ultimate goal written on the board and the daily agenda; this goal is usually in the form of a big question. Regarding making her upper-level math lessons relevant, TL Monroe stated that she will ask a question that exists outside of class and makes her students curious. For example, Monroe said, "I started Statistics the other day by saying, *How many brown bears are there in the world?* The students stared at me. They said they didn't know, so I asked, *How would you count them?*" At that point, Monroe elaborated, the students started throwing out ideas, some silly, until the class decided upon taking a sample. Then, Monroe questioned the class, "is there a margin of error?" Here, TL Monroe said "they instinctively knew what the term meant. She then told the class, "Welcome to confidence intervals." In this way, Monroe attempts to get buy-in from the students by showing them the purpose of the lesson. AP Lewis stated, "Most kids, you can't just expect them to set goals. There has to be a process for that."

During our discussion of goals, AP Jackson said she has observed success with "voice and choice" approaches to goals where teachers give students "the opportunity to choose which things you're going to do first. Good teachers will build time into the schedule to be able to meet with those kids." These short dialogues, said Jackson, work "very effectively for teachers who work with special needs learners all the way up to our highflyers." AP Jackson made the distinction that not all students will have the same goals, and "a key piece to goal-setting is having student ownership with the teacher coming alongside to support and prod and give feedback." AP Jackson re-emphasized individual goal setting when she noted "the end goal may be the same for all of the kids

as far as the completion of the project or the assignment," but some students will be devastated with any below an A, while others will be "happy to pass."

As far as making her subject of foreign language relevant, TL Jones tries to connect to the students' future. Jones said she hopes the depth of her assignments informs students' decisions later in life, such as sparking an interest in studying abroad. Jones emphasized that she finds it effective to also share with the students a sample to illustrate what the end product should look like. Students Piper and Nolan said they especially appreciate when teachers provide samples to clarify what the end product should look like. TL Jones considers it a good sign when students have the wherewithal to ask for samples; she finds this an effective student question to keep throughout school. Her artifact included student samples to clarify her expectations. TL Davis, on the other hand, said that she rarely gives samples, partly because she rarely assigns the same project twice, and because she said, "I don't want to limit them."

Student participants communicated an annoyance for assignments that seemed meaningless. Student Aliyah voiced her desire for knowing the purpose in assignments: "I love to see the whys behind it so I can keep that in mind while I'm doing the work. I have no motivation to do pointless filler assignments." When asked about the purpose of goals and the relevancy of the learning outside the classroom TL Davis said showing students the relevancy of her subject matter is extremely important. She acknowledged that government is relevant outside the classroom walls, and the government and legal principles she teaches are "not some abstract formula," and that her purpose is not about memorizing but rather encouraging students to be able to apply principles to concepts in real life. TL Davis says that this priority manifests in discussion of current events, which

she labeled at an “entry point” for leading students from understanding in the classroom to beyond. Further, this priority encourages focus on media literacy. In fact, her curriculum remains current because it is based upon continually updated web sources as opposed to a printed textbook.

As far as relevance, or purpose, TL Hansen said that often his subject matter lends itself to what he thinks students “need to know to be a good person.” Hansen shared that currently he is teaching historical and cultural perspective as his class discusses various texts. Additionally, he often makes connections to his previous job as a banker, explaining how as a banker, he had to use his speaking and listening skills, both learning goals in English. The goal in math, according to TL Nelson, is not that student recall theorems: “My number one job is to make my students learners. It’s not about memorizing a formula. It’s about students persevering and reasoning through a problem. It’s about me giving them tools.” If teachers can communicate that their skills are relevant, students are more apt to buy in. AP Lewis said, “There are times when the goals have to be given to the students. But there must be some things teachers do that still make the kids buy in, which is how you’re going to get that middle group of students that are kind of interested.” AP Lewis said the high achievers will accomplish all the steps, but the middle group of students need a boost from the teacher. Lewis admitted there are some kids who will not go the extra step “no matter what you do. But trying to get as many of them as you can” is essential.

3.2 Clarifying the Path

Clarifying the path is a priority for the path-goal leader. Particularly, clarifying the path refers to clarifying cognitive challenges to help students achieve goals. Specific

to path-goal theory, House (1971) stated that clarifying the path meant making the path to work-goal attainment easier; this is done by reducing roadblocks and increasing opportunities for personal satisfaction from the followers. For a teacher path-goal leader, clarifying the path answers student questions such as *What are the routes to success in this class*? Additionally, this section acknowledges cognitive load theory in that some questions addressed the easing the cognitive load of students by providing resources available for reference instead of being required memorization. The category of clarifying the path offers two themes. The first category, making resources available, pertains to controlling the context of the classroom by making information part of the environment. The second theme, making new paths, relates to teachers being prepared to chart new and varied paths to learning goals. A teacher being able to flexibly follow a map is both challenging and essential to the role of a teacher leader.

3.2.1 Student Resources Available, Not Required to be Memorized

One practical and immediate way teachers can ease the cognitive load of students is to provide some information as reference material rather than information that must be memorized. AP Jackson stated that the practice of allowing formula sheets, or information sheets in classes such as science is becoming more common. AP Lewis agreed that there has been a shift away from rote memorization. TL Davis offered an example of the provided resource of the media bias chart, which is an active, live document that is continually updated according to research. Thus, Davis says students might memorize the most reliable objective sources, but they will always need to revisit to make sure their knowledge is current. Generally, TL Davis said her expectations for memorizing are low. Instead, she emphasizes logic, reasoning, argumentation, and

research. In terms of providing resources to aid in deep learning, TL Jones cited her use of anchor charts, multiple posters on the wall that include all the question words, common phrases, and common expressions. Anchor charts assist in communication and build momentum and understanding. Jones likened these anchor charts to commonly used formulas in a math class. It anchors them to the curriculum or content, and even gives them "conversation fillers" that help them avoid quitting and/or fumbling in conversation. TL Monroe also used the term "anchor" when speaking about foundational knowledge that students use frequently. Monroe stated that it is effective to give them anchors that do not have to be memorized to build more knowledge.

TL Clark shared that she has a space in her classroom dedicated to student resources. This space offers supplies, such as pencils, whiteboards, and markers, but also laminated information sheets. These information sheets contain basic information for physics classes, including formulas and vocabulary. Clark said these information sheets help the material feel "less intimidating" to the students. TL Nelson supports student learning and confidence by making the review for tests a process of making an information page, and TL Monroe surrounds her students with information, even when students are taking tests. Monroe pointed out her "board of knowledge" in her classroom: "I know students could sit down and figure these logarithms out, but that alone is not what matters. They can use a calculator. But can they manipulate it?"

This concept applies to even simple labeling of assignments. If the label itself is vague, deciphering it increases the students' cognitive load. Student Riley commented that unclear assignment names are confusing. Another helpful practice student Levi named was teachers providing hard copy lists of assignments: "seeing it on paper is a lot

easier than online, like if you have money in your hand and you have money in your account—it feels a lot different."

A resource TL Hansen encourages students to use is Grammarly. Hansen not only endorses this online writing tool, but he also models his own need for the help: "See, I have a whole degree and Grammarly caught something I did." Sharing this tool in this way is possible because of TL Hansen's strategy of modelling writing for his students. He stresses to his students that writing is difficult by showing them how he struggles to compose. Hansen communicates to his students that the writing they produce does not have to be perfect because all writers must go back and revise. Another practical online tool teachers use is calendars. Student Hazel mentioned an appreciation for her teachers using online calendar tools to assist in her organization.

3.2.2 New Paths, or Multiple Ways to Show Learning

No matter the initial learning map, teachers must be prepared to imagine new ways to lead students to learning. This concept includes making multiple ways for students to communicate their understanding. When asked about the offering multiple ways for students to communicate their learning, TL Davis cited Socratic seminar, or as she calls them "fishbowls," as an excellent method for allowing multiple ways to communicate and assess understanding. These seminars acknowledge preparation, and they are assessed by Davis "figuring out what they know based on what they're able to communicate to their peers." Davis made note that "not all students have the capacity to communicate verbally as rapidly or as right," so she built in think time within and at the end of discussions to allow for a pause to think, often prompting students by asking, "What did you want to say but didn't get the chance to say?" Davis explained that in this

way, she continues to build various paths to learning. If the verbal contribution does not come, she will pull the student aside and try a one-on-one conversation where she tries to assess the obstacle. TL Davis shared an example of her students failing to learn 40 out of 49 key concepts over the course of several days where the district was online instead of seated. The online situation proved to obscure the path to learning, so as a teacher leader, Davis decided that the deficit merited a new start, a new map to learning. She looked again at how the material was presented and decided to present it entirely differently. TL Nelson stated she must be "constantly improving" herself. Metaphorically, she stated her "maps change every year."

Similarly, TL Jones said that when students are struggling, she keeps the topic going but presents it in a different way, even if that means recreating an entirely new assessment. Jones also shared an effective strategy in keeping a collection of common mistakes and then crafting the revised lessons based upon that student data. AP Jackson noted that "great teachers over build, over plan a little bit." Jackson explained that it's not always necessary to "show every single slide or bullet point, but you do want to be able to draw on other examples." At this point, AP Jackson shared observing good teachers who can recognize when students are not following even if the students do not ask. Also, Jackson stated, "Great teachers draw upon other students. Teachers are not the vessels of ever little iota of everything. You may have kids that have some deeper understanding to share." AP Jackson noted that drawing support from other students can be a "wonderful experience," and the teacher leader participants indeed shared that drawing on peers to help each other is a common strategy.

When asked about providing multiple ways to for students to show they have learned, TL Hansen recognizes that students often struggle to put their knowledge into words. If they are having difficulty with literature analysis, Hansen explained, he often tells them to tell him about the text. “Often, they’ll just tell me exactly what I was looking for,” said Hansen; then he and the student will write their words down on paper. TL Hansen shared that he often assists student who are struggling by giving them special attention: “I’ll sit down next to them, or I’ll trade out an activity for additional help on something else.” Additionally, Hansen said that he also records Loom videos and sends the video link to his students. Sometimes, Hansen said, the videos work well because students can revisit important details.

All teacher leaders emphasized that to make appropriate adjustments, students must communicate frequently and informally in class. Every assessment in a communication, and sometimes a retake is appropriate. TL Nelson said, “At this point in time, if a student takes the initiative to ask me for a retake, that request is progress. So I will give the retake.” The concept of trying assignments and tests multiple times, said AP Lewis, “was almost unheard of” a generation ago, but the “mindset has definitely shifted.” He elaborated by citing a pillar of the professional learning community, which is the question of how do you know the students understand? He said sometimes you don’t know until the student tries again. Agreeing with offering retakes, AP Jackson said, “If you stop and think about it, how many things in life do you only get one chance? There are truly few. Historically, think of our advancements to humankind—what if we were only given one chance?” Jackson’s passion for this topic shone through as she continued, “Kids need the opportunity to make progress. There’s beauty in growth.”

Every student participant said they have teachers who offer opportunities to retake test or revise papers. Student Nora said she recalls many examples of times teacher allow second attempts at assignments or tests: “It helps a lot. But not for every assignment.” In fact, most student participants communicated a sophisticated attitude toward second chances on assessments. They all voiced their appreciation for the opportunity, but they tempered their attitude by saying the policy should be limited to encourage good habits. The students recognized the logic in some protocols to open retake opportunities.

In terms of accommodating diverse learners in her class, TL Monroe said her expectations could be described as “low floor, high ceiling effect. The first problem is to make everyone in the room feel successful, even the lowest students. Then the questions become progressively harder, and if they don’t get to the last problem, because the last problem is for the highflyers anyway, they don’t care will have already gotten what I needed them to get.” To monitor all levels, Monroe shared that she almost always uses individual whiteboards and markers for quick individual displays of learning. When asked about students being able to show they have learned in different ways, AP Jackson also mentioned whiteboards.

TL Nelson noted that traditionally, math classes have asked students work numerous problems, but she has moved beyond that practice. This shift in instruction was also mentioned by both assistant principals. AP Jackson said that before teachers assigned an extreme number of math problems when now, teachers are stopping required problems once a student demonstrates their proficiency, which makes paths to learning look different. Adding to this discussion, AP Lewis mentioned the practice making fairer assessments, namely considering how much of a concept is understood and then

awarding point appropriately. Particularly, Lewis said teachers are exploring constructing tests where most of the test asks students to demonstrate a basic understanding, so students can earn a passing grade, and then "you can show that you have a full understanding" for higher scores. AP Jackson agreed with the notion of smarter, partial credit. Thus, AP Jackson agreed that effective teachers take time to see the extent to which students know a concept. Beyond math, AP Jackson pointed out that similar practice happens in English class with rubrics, where "students can look at a rubric to gauge what kind of grade they are wanting; they can make a decision about where they want to be as a learner with that teacher." Student Aliyah stated that when given an opportunity to make her writing better, she said, "I definitely take the chance to make my work reflect who I am."

3.3 Removing Obstacles

Removing obstacles is a priority for the path-goal leader. For a teacher-leader, this task includes controlling the learning environment to create an opportunity for learning. Removing obstacles responds to student concerns such as *I'm distracted and can't concentrate.* And *I'm feeling overwhelmed*. This section also encompasses deep work, which is work performed with extreme concentration and allows for full potential of cognitive capabilities as well as shallow work, that includes more menial tasks that do not require complete focus (Newport, 2019). The category of removing obstacles is broad. The three emerging themes include two especially strong themes regarding engagement as a tool for combatting distraction and a closely related theme of the facilitation of deep work. The third theme in removing obstacles pertains less to the hands-on efforts to help students focus and instead concerns thoughtful grading policies and schedules.

3.3.1 Encouraging Engagement, Combatting Distraction

All teacher participants emphasized engagement as a demanding but worthy goal in the classroom. Student Riley pointedly said rules about cell phones will not work; instead, "provide a more engaging environment, and students won't be on their phones so much." Certainly, the teacher must have attention from students to reach them at any level, so anything that draws attention away from learning is an obstacle. TL Clark said that she does not have a lot of classroom rules. Mostly she frames rules around respect, and she has realized "the less I put strict controls on them, the better." Rules about phones, for example, include training the students to know when it is okay to have them out: "I do zero phones during notes, zero phones during instruction, but if you're working on your work, you can listen to music as long as no one else can hear it." Clark went on to say that she limits the focused attention on her to usually 15 minutes. After that point, there are usually two assignments to complete and submit for Clark to assess the level of learning for each student. Students Nolan and Nora cited procrastination as an obstacle. Nolan said "strict deadlines with consequences" helps him avoid procrastination.

Another obstacle to completing work is "busy work," which student Nora defined as "work that you feel like you're not learning anything from. Also, work that the teacher doesn't teach themselves, like just giving it to you online. Teachers teaching it helps a lot more than learning from a computer." Nora concluded that when teachers stay sitting at their desks, those classes are where she is "most unmotivated" to do her work in. Student Ava also stated that if she considers the work "blow off, like bell work" she will "look at her phone, obviously." Student Piper said "the biggest one is stuff that doesn't spark interest in me. When that happens, I'm usually texting my friend, like *what are you*

putting down?" Additionally, Piper listed her busy schedule outside of school as well as simple confusion about the work. As with the uninteresting work, if she is stuck because of confusion, she says she will probably ask her friends for answers. Student Levi mentioned that in the past years he has found virtual learning difficult. As soon as the students log off of Zoom, he said, he feels left alone and can't work. Student Hazel said that homework is an obstacle because "personally, if do not get my work done at school, I won't do it. That's my time." My family issues have "gotten in the way of my learning," said student Tiana. She also noted that she is sure this is an obstacle for a lot of students.

TL Nelson said that the distraction of phones must be addressed daily. Nelson will direct students every day: "You need to put that down because you need to hear what I'm saying. You won't understand." Nelson says though a daily distraction, she only addresses it verbally and "won't make a big to do out of everything." Her approach is to continually prompt and engage. Nelson said even with honors, if she needs the attention of the class after a lull, she will have to prompt everyone again. Nelson said, "Put your phones down, put your phones down. Every time. All the time."

Another strategy both TL Monroe and TL Nelson shared to encourage engagement is Experience First, Formalize Later (EFFT). The experience with the subject matter, including questions they know the answers to and questions they can't answer yet, "creates curiosity," said Monroe. Curiosity spurs inquiry, and then, said Monroe, "students start dialogue that leads to discovery." Then afterwards, TL Nelson elaborated, "we formalize with notes and vocabulary." In this way, Nelson continued, we begin as a "facilitator of conversation, not a sage on the stage." TL Monroe stated that during her frequent review sessions, these sessions "are always in a group setting." Monroe repeated

her method of EFFL here and said that “before instruction to do the formalizing, it’s always group work. Nora also mentioned that she feels comfortable learning in small groups because “you’re not scared to make mistakes, but if you do, your classmates help you.” Utilization of small group was also found in the teacher artifacts; every artifact used small-group support as a step in the overall learning process. Nolan said “if you have to work with others, it kind of forces you to get started.” Nora also said that in group work, she is less inclined to be on her phone; she is more inclined to be on her phone “if I’m already on my computer and it’s quiet.”

In terms of addressing disengagement, TL Jones shared that verbal re-direction is her go-to strategy for getting students back in the lesson. Additionally, Jones emphasized that she tries to use humor to coax students back into focus. When asked about addressing disengagement from students, TL Davis mentioned that one powerful strategy is to “get their peers to draw them out”; Davis says she “believes in the power of student-led discussions because students are more likely to participate if their peers ask them questions.” Davis explained that student-led discussion must initially be facilitated by the teacher, so she will set the tone by modeling ways spur discussion. TL Hansen emphasized the power of teacher/student dialogues. Or, in extreme cases, teacher/student/assistant principal conversation. TL Monroe said that she does not have many disengaged students in her upper-level classes, but she does have some. She combats this with small groups, aiming for “hopefully community in my room.” Further, since “disengagement comes from a lack of knowledge,” said Monroe, she also moves the students around a lot, making sure to sit struggling students near students who have mastered the skills.

Teachers, principals, and students all cited chunking as a method of organization as well a way to help students focus. Student Piper cited teachers chunking time as a way to help with controlling distractions. She said a strict list with times on it works best. Student Riley said, "clear separation" between activities and expectations is best. Here, Piper noted that she feels strong emotions at the prospect of a teacher taking her phone: "When they take my phone, I just feel anger. I feel restricted and don't want to do their work. They are not treating me as you would treat a co-worker. It should me more of an equal thing." Hazel echoed this sentiment by saying "I don't like my phone taken whatsoever. I am fine with being told to put it down, but I don't want it taken."

Student Aliyah pointed out reasons she grabs her phone, including feeling as though she already knows the material being discussed, needing a mental break, or checking her calendar. Aliyah noted that for her generation, "it's just like an unconscious thing. That's kind of an issue with this generation. We grew up with technology the entire time. It's easier for us to think looking at our phone is nothing." At this point, Aliyah pointed made a very self-aware comment: "We can't really see the full picture." She went on to say that often her generation doesn't see the harm, thinking "there's no point in listening, but that's not always true." Students Sophie and Hazel mentioned another reason for phone use during class, which is a coping mechanism, or escape, from anxiety or discomfort.

3.3.2 Facilitating Deep Work

Like any skill, the ability to work deeply must be learned and practiced; thus, teacher leaders must consider how they can inspire and train students in the ability to participate in deep work. TL Clark said that she challenges students to think deeply and

abstractly at the beginning of a unit. She does this by creating a "low stakes environment where there is no penalty for being wrong," and then she sets up the lesson by pointing out how they have shallow knowledge of something they have never really tried to understand deeply. For example, Clark said, "I will ask them to think about gravity. Of course they know what gravity is. But have they ever thought about it? No." This method echoes the logic behind what TL Monroe and Nelson shared about EFFT strategy where students reflect on their experience first, and then receive formal notes and vocabulary.

When reflecting on what shallow and deep work looks like in the classroom, TL Monroe said she relates shallow work to recall and deep work to synthesis and application. And just like wading into deeper waters, Monroe said that her reviews often start shallow, "not hurting their brain," and progress to "bringing in new content and getting into deliberate practice that takes more focus." Commenting upon deep work, TL Nelson said deep does not necessarily equal difficult; teachers must put the content into perspective because any brand-new material can pose a serious challenge. TL Nelson said that one way to make a manageable focused lesson is to present the lesson and task on a single piece of paper, what she calls "one sheeters." Nelson said she deliberately limits the volume of new material. She said that she is "better off taking 20 minutes focusing on one problem, teaching them all the ways to reason and persevere, than giving them 40 problems that mean nothing." I observed chunking in delivery and execution of the teacher artifacts as well, often in the form of chunking expectations, from group, to teacher-led, to independent work.

TL Davis, who entered the teaching profession after nine years practicing law, said that when she first started teaching upper-level classes, she "felt this need to be like a

college professor, where I was overly complex and demonstrating how challenging the material was." Davis said she now sees how important it is to clear the mental pathway, give skills to get to complexity, and then engage in deep work. TL Davis also echoed the logic behind the EFFL where she uses current events as the entry point, or the experience with the subject matter. Then, Davis explained, after some simplistic connections, she dives deeper with the students. Adding to this concept, TL Hansen said he too follows this format, adding that to do so properly, he "must start off with the end in mind." He starts large concepts off with questions to spark curiosity. Then, Hansen continued, he can offer smaller pieces of the whole in the process of learning. TL Jones pointed out that deep work does not necessarily imply abstract, conceptual thinking. Jones teaches foreign language, so some of her classes are at a rudimentary level, so there are contexts in which rote memorization is deep work, since it is new information.

In terms of facilitating deep work, TL Davis emphasized that she is very specific about that that looks like: "It's phones down, earbuds out, and eyes on me." Further, Davis shared that these directions are given continually, which echoes the participant answers about defining goals. Davis said she knows there is a belief that students should already know your expectations and should not have to be prompted, but she stated, "these are teenagers with eight different teachers. I have no problem restating my expectations and being clear." Davis said this sometimes means she will stop in the middle of a lesson if a student is distracted by their phone. TL Davis shared another example of a strategy that facilitated deep work by explaining her independent reading assignment, which consisted of student-choice of relevant nonfiction texts. Davis, citing

Kelly Gallagher's research on providing class time for student reading, said that she began with 15 minutes of silent reading time and progressed to longer sessions.

TL Jones uses brain breaks and incorporation of movement to break up the monotony; for example, she shared that she uses a method called Total Physical Response (TPR) where students act out gestures as prompted by Spanish phrases. Overall, she noted that depending upon the level of classes, some classes can handle having phones out and listening to music. Upper-level classes have more time to work at their own pace with phones out than a typical freshman class. Overall, Jones concludes, it is an interactive environment where she has even broken up the intense focus sessions with short yoga sessions. TL Hansen said that he opens his lessons with shallow, collaborative work. He explained these early steps as an interactive time where students teach their peers and Hansen models skills. This modelling step was evident in his and many other teacher artifacts. TL Hansen connects all the smaller pieces into a culminating event that requires deep, independent focus. Commenting upon classroom environments that allow for productivity, Nora said she prefers teachers who "don't tolerate any distractions." She said she didn't want an overly rigid environment, but it is "probably better to have a more strict teacher that doesn't tolerate non-classroom behavior."

3.3.3 Creating Thoughtful Grading Policies and Schedules

One way teachers can remove obstacles to learning is by creating purposeful policies and schedules. Informed policies require research, reflection, and forethought. TL Clark elaborated on her grading practice to exemplify how she removes common obstacles to learning. Clark said she practices equitable grading, so only quizzes and tests

count in her overall class grade, and students can retake them as many times as they want through the entire semester. Clark emphasized that she repeats the importance of homework to the students because that practice—though not worth points—is essential to truly understanding the material. Clark clarified that the motivation is the learning, but "even if it's not intrinsic motivation, I am forcing the result that I want by rewarding the knowledge on the test." Even if students are behind, both in knowledge and time spent in class, TL Clark requires them to take the test when everyone else takes the test. Clark went on to explain that the reason for this is twofold: she can immediately get accurate data on the student, and the student then has a starting point for scheduling a retake, instead of a zero in the gradebook and no exchange of information, no feedback.

One strategy for removing typical obstacles to learning TL Monroe shared is the way she presents material coupled with her homework policy. Monroe does not consider homework important because it does not provide immediate feedback. For this reason, Monroe organizes her class time where most of the class period is spent in review: "I would say 70% of my class period is doing some sort of review and feedback activity. Homework is optional in my class." Thus, Monroe has structured her class to value the interaction and preparation for the assessment.

On the other hand, TL Nelson mentioned that she "collects daily work all the time because with freshmen they're learning to be a good student. I even collect their notes, and I give them points and reward them for being present and being attentive and participating and filling it in." TL Nelson said that awarding points for showing up and participating is necessary "to reach the broad spectrum of kids. Some of those kids just need to be given the opportunity to show that they showed up. They aren't' going to

make an A unless they can demonstrate genuine learning, but sometimes students receive points for paying attention, which often translates to a D or C. But their presence indicates a level of learning." Thus, the data offer multiple versions of effective grading policy, thoughtful variations dependent upon the teacher leader, the course, and the students.

The teacher leaders all acknowledged that students have busy schedules both in and out of school, and though they communicate the importance of timeliness, they all could cite exceptions to due dates, sometimes in the form of students asking for extensions, and sometimes in the form of the teacher recognizing originally scheduled due dates are no longer appropriate. Late work policies varied, but all teachers shared thoughtful and justified reasons for their timeliness requirements. On this topic, students voiced their appreciation for teachers understanding what student Piper called, student "situations, like your family that's out of control." Students also were clear that due dates are necessary, and they understood and wanted deadlines.

3.4 Providing Support

Providing support is the fourth priority for the path-goal leader. For a teacher-leader, this is a perpetual priority in the form of feedback and re-explanations. Providing support answers student questions such as *What if I still don't understand?* and *How do I ask for help?* This section also encompasses the importance of teacher-student relationships. Table 1 is relevant to this section because it speaks to how all student participants, from all academic and grade levels prioritize the relational aspect of their teachers. The human qualities were paramount, but as noted in the defining goals category, the next frequent were descriptors regarding organization.

Table 1

Student Participant Responses to What are three words that describe your best teachers?

Student Participant	Descriptors for Effective Teachers
Aliyah, grade 11	Adaptable, communicative, willing to learn
Ava, grade 12	Communicator, easy to connect with, organized
Hazel, grade 9	Interactive, patient, understanding
Levi, grade 10	Attentive, best-friend quality, flexible
Nolan, grade 11	Collaborative, hands-on, patient
Nora, grade 11	Easy going, flexible, not stressed
Piper, grade 12	Caring, involved, organized
Riley, grade 11	Communicator, organized, thorough
Sophie, grade 12	Cooperative, friendly, personable
Tiana, grade 9	Generous, open, patient

Overall, providing support is the category that garnered the most data. The two emergent themes, conversation for feedback and personal relationships, are closely related but arguably separate because feedback is particularly tied to academic goals and personal relationships can encompass both academic endeavors as well as social and emotional wellbeing.

3.4.1 Using Conversation for Feedback

An essential component of learning and growth is feedback. Across all levels of my data collection, teachers, principals, and students, the importance of feedback was expressed. AP Jackson commented on feedback by emphasizing it must be "timely and specific." In terms of how that feedback is delivered, AP Jackson pointed out it might be given aloud to the whole class, and it might be written, but the most effective delivery is verbal feedback given face-to-face: "calling students up individually is the best way to communicate feedback." Another facet important to feedback, Jackson said, was it "needs to be given in a context where there is an opportunity for improvement." Thus,

there needs to be a path to implement the feedback. Immediate feedback was evident in across all teacher artifacts, both in the form of structured class-wide discussion and teacher-student conferences.

Teachers and students noted many methods of feedback, including creating videos, audio files, and written feedback; however, a strong finding across all participant data was that the preferred delivery of feedback is spoken. Dialogue allows for the most immediate feedback and connection. TL Jones encourages students to seek help by keeping them thoroughly informed through sharing data. Jones said she gives them breakdowns of scores by classes and by skills. She will analyze the data with the classes, remarking on the distribution of grades and discussing how to address the deficits.

TL Nelson said that a productive and positive classroom is "like a constant conversation." Students Ava, Hazel, Tiana, and Aliyah also said that the best way to get feedback is through conversation. Feedback is "so much better when they do it in person," said Tiana. All student emphasized a desire for a personal conversation; Ava said that having connections "makes me respect teachers more and want to learn." Student Riley expressed the ideal classroom environment is one that is "a conversation through the class period. If there's a conversation, I'm not going to open my Chromebook and take a step back. If I'm interested in what you're saying, I won't get on my phone."

3.4.2 Personal Relationships

The theme of personal relationships was the strongest, most passionate communication from teachers and students. No matter the level of student I interviewed, they all wanted a teacher to see them as a person and car about them beyond the context of school. Teachers communicated that the personal element must exist for student to be

part of the dyadic teacher/student relationship. Regarding encouraging students to seek help, teacher leaders conveyed teachers must explicitly encourage students to ask for help.

TL Nelson said she actively canvases the classroom, evening using the word "hover." Nelson addressed student comfort level: "If you don't let the kids know that you want to help them and that you love them and care about them, they're not going to ask you for help." Nelson said that she connects with students by using humor and avoiding the formality of new relationships: "I don't act like I'm getting to know new students. I literally talk to them like I've know them forever. So they get the message of oh, she's relaxed and patient. She cares." TLs Nelson and Jones said that it is important to be human. TL Nelson said she makes mistakes in front of her students and responds positively when they correct her. These quotes correlate to the adjectives students cited as descriptors listed in Table 1 of the best teachers, namely "not stressed," "patient," and "caring." TL Davis said she focuses on making students feel comfortable and avoiding being a "gatekeeper" of knowledge. Student Piper said if she does not have a positive relationship with the teacher, she won't ask for help. If she is intimidated, she will bypass the teacher and simply ask her friends to text her the answer.

The necessity of seeing students wholly was supported in every interview of teachers and students. Student Levi said, "all the best teachers let me be like, who I am. They let me be very human. And they interact with me." TL Davis shared that the start of every class period, particularly after the weekend, begins with a personal check-in time with the students. She described this conversation as "laid back" and way for her to "take their temperature." This time also helps her gather information about other pressing

deadlines in other courses. Students Hazel and Tiana went so far as to say the best teachers are like your "friend." Levi also used the term "best friend," and when pressed to explain his meaning, he said "they're teaching you as someone that wants to teach you. Like they want to give you advice, and they'll like even go out of their way and share some personal experience." Student Sophie ended with some wisdom for personal relationships: "If you close yourself off to children you're teaching, you're not going to have a personal connection—they're going to close themselves off from you."

In terms of checking in with her students on a more personal, emotional level, TL Clark said the majority of her time is spent checking in on students personally, focusing on social-emotional learning. Piper said she really appreciates when teachers do "mental health checks," and she concluded by saying the best teachers "look at their students as more than students. They understand it's not always about school. They just really care." Clark noted that the students who are involved in extracurricular are likely getting some emotional learning from those activities; thus, she worries most about students who "do not have a supportive enough home environment" to be involved, which is why she prioritizes their autonomy and humanity. "It all boils down to students are people too," Clark concluded. AP Jackson agreed: "Relationships are definitely key." AP Jackson concluded her thought by saying "Students can be led down a path to a goal because of the established relationships and all the supporting things about good lesson planning and classroom procedures. It leads to really enriching opportunities." If the teacher builds a relationship, AP Lewis argued, the explanations will work more effectively: "If you work harder on the front end, trying to build the relationship stuff, they will be more comfortable with what they ask, and they just overall will learn better. AP Lewis pointed

out that inherent authority of being a teacher is enough for some kids, but not all, and that is where relationships are key.

In addressing personal connections with students, TL Hansen stated, “If you show them you care for them, they’re more likely to care for you.” These personal relationships translate to students being more willing to participate in class discussion and make personal connections to the material. Hansen also added that he will strategically put struggling students in supportive groups. Overall, TL Hansen concluded, “You just have to love teaching. Not every day is going to be good—sometimes you’re going to want to pull your hair out. But show the kids you love them and you’re here for them. Be a mentor to them.” Hansen lives this priority. He spends a lot of time building personal connections with kids because the thinks if you “care first, you can teach more intensely after.” TL Davis likened her lived experience of teaching to a combat zone that a person just can’t understand until they put “boots on the ground.” Davis clarified that “you can study educational theory, but until you’ve been a classroom teacher, you don’t understand all the demands, the need to think quickly, to chuck your original plans out the window in order to meet students where they are.” TL Davis, a former lawyer, offered, “If you want to put this in your paper, it’s more difficult than practicing law. Teaching is just so much better. I feel like I’m doing some good.”

As far as connecting personally, TL Jones reiterated her preference to incorporate humor: “I have fun. I joke with them. Sometimes, pre-COVID days, we would go to breakfast or lunch. We would spend time together in World Language Club.” Student Sophie stated she likes teachers with a sense of humor. Jones said she thinks the best compliment a student can give her is if the students tells her she inspired them to learn

Spanish. Jones said, “when the kids actually do go abroad and come back and visit me to share their experience, and I find they are now fluent speakers, my gosh, it’s so special. To know I had a piece in their growth.” Teaching is personal and it exhausts you entirely, according to TL Jones. “Let me put it metaphorically,” said Jones, “in Spanish, there is a saying—*sacarle el jugo*—which means all the juice has been sucked out of the lemon. That’s what teaching is for me. It takes everything out of me. And that’s because I care so much. About my subject and my students. Honestly, I teach my guts out. It changed my life, being bilingual, and I want to give kids that experience.”

TL Monroe concluded her interview by likening the job of teacher to that of a magician, having to make things happen with no time. Monroe compared her job to her husband’s executive job, and she said that teachers differ from other leaders in that “teachers don’t have the luxury of time to make decisions.” TL Monroe shared that teachers must consciously choose the role of leader by actively connecting to students every day. The most important aspect of a good teacher, according to students Nora and Aliyah is that the teacher is “passionate about what they’re teaching.” Aliyah observed that students can feel the energy of a teacher and can tell if teachers don’t want to teach, and “that’s a problem because kids are energy suckers. We’re gonna take the negative energy already in the room and expand it by 100.”

4 Discussion

This study set out to examine the reality of the teacher leader who both creates maps and leads students along those various learning trails. The data tell many stories of the multiple ways teacher accomplish this challenge, and many insightful teaching strategies became clear. First, it is clear that effective teachers carefully consider the task

of planning, or map making, well before students enter the room. As Northouse (2019) illustrated the need for a broad perspective by describing it as seeing from the balcony, every teacher leader participant in the study made it clear that significant time is spent in forethought, planning the maps for students. Importantly, the preparation is only the beginning of the learning process because teachers must adjust those paths and goals according to the student's "self-efficacy or confidence" to see a pathway to the individual learning goal (Hattie, 2019, p. 166). The participants in the study illustrated this concept with the emphasis on a continual feedback loop, primarily in the form of conversation, but also manifesting in multiple strategies from the simple to the complex. Constant interaction with students addresses the many different learners in the classroom and corresponds to what current research indicates: Educators cannot lead students to educational goals by using a single method (McBride, 2004; Subban, 2006; Tomlinson, 2000). Instead, teachers must use various approaches, or differentiated learning (Gumpert & McConell, 2019; Tomlinson & Dockterman, 2002; Wormeli, 2017).

Though the participants did not necessarily use the vocabulary of the theoretical frameworks of the study, the theoretical concepts nevertheless existed. Namely, data aligned to what House (1996) said path-goal leaders create: connections between effort and goal attainment. Specifically, House said path-goal leaders "engage in behaviors that complement subordinates' environments and abilities in a manner that compensates for deficiencies" (p. 335), or as Northouse (2019) explained, path-goal leaders help followers along a path to success by choosing fitting behaviors and increasing "expectations for success and satisfaction" (p. 118). Thus, the data I collected could be organized by these behaviors: (a) directive, (b) supportive, (c) participative, (d) achievement-oriented, (e)

work facilitation oriented, (f) group-oriented decision process, which is connected to participative leadership, and (g) value-based leadership behavior (House, 1996). Notably, one behavior House outlined that I omitted here is the representation and networking-oriented behavior, which I believe is relevant to teaching, but it includes making connections outside of the classroom. The study focused on the classroom environment, so networking is not included in the analysis. In addition to the leader behaviors, information in Table 2 includes terminology connected to cognitive load theory, in particular deep work. Table 2 outlines a summary of ways the data aligned to the established theoretical frameworks of the study.

Table 2

Study data represented according to path-goal leadership behaviors originally outlined by House and Mitchell (1974) and House (1996)

Types of Leader Behaviors	Behaviors of the Path-Goal Teacher-Leader	Teacher-Leader Behaviors and Decisions to Facilitate Deep Work
Directive	Make expectations clear Repeat expectations in more than one way Clarify policies, rules, and procedures for all students	Do not require expectations, policies, rules, and procedures to be memorized; instead display clearly and repeat often Expectations should include deliberate practice, not just mindless repetition
Supportive	Create a friendly environment Treat followers with respect Model expected behavior Listen with receptive attitude	Consider stress of other courses and student life outside of classroom Create a dependable daily schedule Create environment that allows for deep work, even if that means being strict about technology use Insist on a space that is distraction-free when teaching complex material

Cont. Table 2

Types of Leader Behaviors	Behaviors of the Path-Goal Teacher-Leader	Teacher-Leader Behaviors and Decisions to Facilitate Deep Work
Participative	Share in some decision making Make the path-goal relationship plain Create student choice when appropriate Create interactive discussion and dialogue	Provide guidance when students have choice; do not let the confusion of options overtake the goal of learning Facilitate discussion and dialogue by teaching students how to participate; do not assume knowledge to the point that students cannot focus on the point of the conversation/dialogue Describe how deliberate practice helped you/ model deliberate practice
Achievement-Oriented	Diagnose student needs; adapt Set reachable, challenging goals Empower students Allow student to take responsibility for learning Encourage belief in student self-worth and confidence	Meet students where they are so their minds are not overwhelmed or bored Empower students with the understanding of the efficacy of deep work so that they can reap the benefits Practice and build deep work skills so that students can become better
Work Facilitation	Plan ahead Provide a map to success Schedule every moment of the class period; chunking Provide frequent and apt feedback Resolve problems Allow mistakes Provide extra help/ resources Lead despite surprises	Provide clear maps for students so that they can anticipate tasks and know why their attention is required Structure time for shallow and deep work; students should anticipate when deliberate practice is required Make schedule simple enough to reduce attention residue
Value Based	Create a safe environment Insist on kindness and respect for all in classroom Show students passion for learning Maintain honesty and integrity	Slow down enough to get to know students to develop a personal relationship; use humor See whole student Make students comfortable so they can concentrate

Note: This table represents the ways teacher leaders display path-goal leadership behaviors. One behavior, Representation and Networking, is omitted, not because teachers do not represent students and network for them but because my inquiries of my participants focused on the context of the classroom exclusively.

More broadly, the most noteworthy material from the data can be divided into two aspects: controlling the context and engagement. Though the four path-goal priorities were helpful in categorizing the findings, upon looking at the findings as a whole, a two-part division offers an efficient and essentialized arrangement for discussion.

4.1 Controlling the Context

At the heart of path-goal leadership theory is the directive for leaders to enhance the context in which followers work by clarifying cognitive challenges to help followers achieve goals (House, 1996). So too must teachers control the context of learning for their students. As stated earlier, this begins with the forethought of creating maps for learning goals before students arrive. Nevertheless, once the dynamic interplay between teacher and students begins, so too does the need to communicate the direction and destination. Considering establishing the context for learning, that is requirements and expectations, the most remarkable moments in this section of data align with research by Marzano et al. (2001), which stated that there is a need for explicit teaching of students, communicating what students need to know and how they can do those things. The teacher leader participants all support this notion of clear and direct instruction on requirements and expectations to tell the whole story to students. Telling the story describes the act of teachers contextualizing material, and teachers facilitate this by finding entry point to learning. All teacher participants noted that this process includes modeling and clarifying that learning means mistakes will happen, so mistakes are expected. All these expectations, the principal participants communicated, must be delivered clearly and often. The student participants overwhelmingly expressed a need for verbal, clear, and set expectations that are explained face-to-face.

Both the principal and teacher participants noted that not only are teachers using various methods of gather data, they are also adjusting instruction and required assignments in a way that has not traditionally been done. Effective teachers are adjusting their strategies and practices to prioritize essential concepts. Sometimes this means fewer required problems if mastery has already been established. Conversely, the practice of second chances is widely used to accommodate for students who are not traveling the path to learning as quickly as other students. All student participants shared that they have teachers who offer multiple opportunities to retake or revise work. Students appreciated the additional learning opportunities and noted that retakes should be used for learning and not be abused by students who do not want to study.

Organizational aspects controlled by the teacher ease the cognitive load for students. This notion goes back to teachers focusing on essential, larger concepts such as reasoning and perseverance. If those larger skills or habits are emphasized, teachers can help students get there by facilitating organization, even making organization part of the lesson. By explicitly helping students organize thoughts, papers, and due dates, teachers are easing the cognitive load to free up mental capacity for the essential skills required for the learning objective. Another strategy that eases the mental load is making information available instead of requiring memorizations. Both teacher and principal participants share multiple ways teachers are successfully making resources available such as tools to learning instead of obscuring the view of the learning destination. Thus, teachers are following the essential notion of the path-goal theory in that they are complementing the environment of their followers by providing cognitive clarifications.

4.2 Engagement

Engagement is a wide-ranging term that encompasses both teacher and student engagement, as well as physical and mental engagement. Engagement requires attention, and research by Hattie (2009) showed even with a guide, a student must be an active participant; Hattie also stated deliberate attention is essential to authentic learning. Newport (2016) offered two distinct requirements for deliberate practice: "your attention is focused tightly on a specific skill you're trying to improve or an idea you're trying to master 2) you receive feedback so you can correct your approach to keep your attention exactly where it's most productive" (p. 35). These distinctions inform the most significant conclusion from the data, which is that teachers must make every effort to ensure student engagement in the process of learning. Strategies for engagement are vast, but one of the most noteworthy is time chunking, which was shared as effective by all levels of participants involved.

Another common strategy among teacher participants was Experience First, Formalize Later (EFFT). Some teachers used that exact strategy name, but even if not labeled with this exact acronym, all teacher leader participants used student experience to spur curiosity and inquiry at the beginning and throughout the learning journey. All teacher participants communicated that to combat disengagement due to phones continual prompting is required. To keep students focused and in a deliberative attentive state, teachers must frequently insist student refocus on the task at hand. Another strategy to help refocus that many teachers shared is the Total Physical Response (TPR), which acknowledges that whole-body engagement can re-energize student focus.

The student data made clear phone distraction is one teachers must deal with perpetually because these students do not even imagine an environment without it. Students consider their phones as extensions of who they are. Students use phones for academic needs, familial responsibilities, social connection, and coping mechanisms that help ease anxiety. Students shared upset feelings, even anger, at having phones taken away. Student will admit their phones can be distractions, but they all cite their importance as trumping any thought of functioning without them. The data suggest the most effective way to control student phone use is not rules but rather engagement. Intentional engagement with students was cited as essential by teachers, principals, and students. Engagement in curriculum is a process that starts shallow and takes time and effort to become deeper. Leading students to deeper thinking requires building working schemas for larger, more complex ideas. This method can be understood more fully when considered through the lens of cognitive load theory because CLT notes that novices lack prior schemas to construct learning. Teachers are required to meet students where their knowledge level begins, so a challenging cognitive load could be rudimentary knowledge; thus, understanding difficulty is relative is a key to good teaching. Sweller et al. (2019) stated that if the cognitive load becomes overwhelming, learning is diminished, which is why instructional methods must decrease extra load in the form of distractions.

The human element that animates necessary engagement is the personal connection between teacher and student. Of all desires communicated from students, by far the most emphatic need was for teachers to see them and human and form authentic connections. The principals lauded positive teacher/student relationships as the most defining marker of a good teacher. Principals observed that teachers who foster

meaningful relationships with their student have students who are more likely to meet learning goals as well avoid negative behaviors. Specifically, principals noted these connections in the form of dialogue where teachers not only make personal contact but also offer student timely feedback and an opportunity to improve.

Hattie (2009) recommended teachers constantly seek feedback information as to the success of their teaching. The teacher participants noted that interactive conversations are the only way to gather data and provide feedback quickly enough to make progress in the classroom. All participants agreed that verbal feedback was the most effective communication method. These conversations with individual students yield results because they cater to each learner, as suggested by research saying personalization in education encourages academic outcomes (Goodwin, 2017; McClure et al., 2010). Beyond the dialogue is the small group or class-wide conversation that teachers, principals, and students voiced as the way learning and community are created. Teachers are leading in this collaborative process, and as Bruffee (1984) stated, the data suggest a prodigious and worthy challenge for teachers: create and maintain a demanding academic environment that makes collaboration—social engagement in intellectual pursuits—a genuine part of students' educational development. Bruffee's sphere of influence was the college classroom, but the sentiment remains true at the secondary level. Effective teacher leaders create a community by continual personal conversations on the peripatetic journey through learning and life.

4.3 Implications and Suggestions for Practice

The findings from this study have implications for practice for both teachers and instructive decision-makers, such as principals and learning specialists. The implications

for teachers build first from acknowledging the vast and multi-faceted undertaking teaching is. Table 2 represents the various leader behaviors exhibited by an effective teacher, and this demanding list legitimizes viewing teachers as leaders. Practically, what this means, however, is higher expectations for teacher composition of their classroom map, to continue with the overarching metaphor of the study.

Higher expectations for forethought of several aspects of teaching might manifest in several ways. Decision-makers might set aside more time at the beginning of the school year for collaboration. Small groups of teachers could benefit from discussion and planning time before the semester begins. For these sessions, I suggest using a method such as the Tuning Protocol from the National School Reform Faculty (2015) that facilitates critical and precise revision of materials. In this context, the fine tuning would pertain to class syllabi. I suggest teachers be pushed to consider and formally state the following aspects of their classroom and learning plan for the school year:

- How assignments will be labeled and where the details will be posted
- The modes student will employ to show they have learned material
- Where resources will be stored or posted for student use throughout the year
- What is the teacher's retake/revision policy for work (with a justification)
- Required or suggested student organizational materials
- Expectations for engagement and attention during and outside of class
- Explanation of grading policies (with justification)
- Statement on how and where students can expect feedback as well as how they can ask for more

This study also reveals a need for further training and discussion on the topic of understanding mental focus and facilitating student focus. This concept demands more education on the myth of cognitive multitasking and the difference between deep and shallow work as well consideration on reasonable student expectation for deep, deliberate work sessions in class. In this vein as well, principals and teachers alike should revisit current policy and individual practices of student cell phone use. The data show clearly students find cell phones not only essential but their right to have and use. The data also show that teachers must continually prompt students put their phones away during instruction and work time. More discussion and united efforts are needed to change the culture in terms of what a productive classroom environment looks like. Teachers and students both know a simple "no phone" rule does not work. This power struggle is complex. Though the teacher holds coercive power, the ubiquity of phone use renders the power weak. Further, even if a teacher put forth all their energies into punishments for phone distraction, Levi (2017) stated that even if coercive power results in behavior that is desirable, if people only act on reward and coercive power, "the result is compliance, but [not] acceptance" (p. 159). If teachers reach for coercive power, they risk hurting relationships. The data show relationships are essential; thus, the question for teachers and principals to discuss is, how can policy, practice, and personal relationships cultivate the academic culture we all desire?

4.4 Limitations and Opportunities for Further Research

The present study was broad in the sense that the teacher and student participants represented 9th grade through 12th grade regular education classes. There is merit in considering how a narrower focus might yield more particular results, i.e., teachers who

teach similar classes, both in content and level of academic demand, could learn from each other in a more tailored fashion. Further, considering different sites in the same district could yield helpful findings. Another limitation that could spur further research in this regard is by investigating Special Education classes.

Beyond alterations in the sample size and composition, another study that delves into the interpersonal aspect of the study could prove useful. This study established the importance of dialogue and connection, but an additional study could investigate more specifically what factors contribute to those personal connections. For example, does the age, ethnicity, and/or race factor into students' engagement with the class and the class material? Further, is there a difference in engagement levels in smaller class sizes? Also, a study on positive reinforcement to enhance motivation would be essential information for teachers.

Another data collection method could also prove useful. This study was entirely qualitative, so further research might utilize a far-reaching student survey collecting quantitative data on student priorities and phone use. Further, collecting syllabi as an educational artifact would provide more insight into common classroom structures and priorities.

Finally, this study used cognitive load theory as a lens for better understand and framing on the part of the researcher, but as the researcher, though I introduced the conceptual framework during the focus group, it would be inaccurate to say I led the participants in fully understanding and implementing CLT terminology. Thus, an opportunity for further research in this regard would be a deeper scientific dive into the brain science behind focus and distraction.

References

Adamczyk, M., Adamczyk, A., & Tłuściak-Deliowska, A. (2017). Using mobile phones by young people: The trends and risk of addiction. *Psycho-Educational Research Reviews*, *7*(1), 29 –. Retrieved from https://www.journals.lapub.co.uk/index.php/perr/article/view/190

Alavi, S. S., Ferdosi, M., Jannatifard, F., Eslami, M., Alaghemandan, H., & Setare, M. (2012). Behavioral addiction versus substance addiction: Correspondence of psychiatric and psychological views. *International Journal of Preventive Medicine, 3*(4), 290–294.

Anderson, T. C. (2020). Academics, achievement gap, and nutritional health: The impact of coronavirus on education. *Delta Kappa Gamma Bulletin, 87*(1), 14-17.

Baker, G. A., Roueche, J. E., & Gillett-Karam, R. (1990). *Teaching as leading: Profiles of excellence in the open-door college*. The Community College Press.

Bruffee, K. A. (1984). Collaborative learning and the conversation of mankind. *College English*, *46*(7), 635-652. National Council of Teachers of English.

Christensen, D. (2020). If you're trying to be productive, stop multitasking. *ONS Voice*, *35*(7), 28.

Cheong, P. H., Shuter, R., & Suwinyattichaiporn, T. (2016). Managing student digital distractions and hyperconnectivity: Communication strategies and challenges for professorial authority. *Communication Education*, *65*(3), 272–289.

Common Sense Media (2015). Landmark report: U.S. teens use an average of nine hours of media per day, tweens use six hours. https://www.commonsensemedia.org/about-us/press-releases/landmark-report-us-teen-use-an-average-of-nine-hours-of-media-per-day

Drysdale, L., & Gurr, D. (2017). Leadership in uncertain times. *International studies in educational administration (Commonwealth Council for Educational Administration & Management (CCEAM))*, *45*(2), 131–159.

Duncan, D., Hoekstra, A., & Wilcox, B. (2012). Digital devices, distraction, and student performance: Does in-class cell phone use reduce learning? *Astronomy Education Review*, *11*(1), 1–4.

Glass, A. L., & Kang, M. (2019). Dividing attention in the classroom reduces exam performance, *Educational Psychology*, *39*(3), 395-408.

Goodwin, B. (2017). Personalization and failing forward. *Educational Leadership*, *74*(6), 80–81.

Gumpert, M., & McConell, W. (2019). Different strokes for different folks. *Science and Children*, *57*(2), 62–70.

Hari, Johann. (2022). *Stolen focus: Why you can't pay attention—and how to think deeply again.* Bloomsbury Publishing.

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.

House, R. J. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *Leadership Quarterly*, *7*(3), 323. https://doi.org/10.1016/S1048-9843(96)90024-7

House, R. J., & Mitchell, T. R. (1974) Path-goal theory of leadership. *Journal of Contemporary Business*, *3*, 81-97.

Jiang, J. (2018). How teens and parents navigate screen time and device distractions. https://www.pewinternet.org/2018/08/22/how-teens-and-parents-navigate-screen-time-and-device-distractions/

Kraushaar, J. M. & Novak, D. C. (2010). Examining the effects of student multitasking with laptops during the lecture. *Journal of Information Systems Education, 21*(2), 241-251.

Lee, S., Kim, M. W., McDonough, I. M., Mendoza, J. S., & Kim, M. (2017). The effects of cell phone use and emotion-regulation style on college students' learning. *Applied Cognitive Psychology, 31*(3), 360–366.

Lee, S., McDonough, I. M., Mendoza, J. S., Brasfield, M. B., Enam, T., Reynolds, C., & Pody, B. C. (2021). Cellphone addiction explains how cellphones impair learning for lecture materials. *Applied Cognitive Psychology*, *35*(1), 123–135. https://doi-org.proxy.mul.missouri.edu/10.1002/acp.3745

Leroy, S. (2009). Why is it so hard to do my work? The challenge of attention residue when switching between work tasks. *Organizational Behavior and Human Decision Processes, 109*(2), 168-181. Elsevier.

Leroy, S., & Schmidt, A. (2016). The effect of regulatory focus on attention residue and performance during interruptions. *Organizational Behavior and Human Decision Processes, 137,* 218-235. Elsevier.

Levi, D. (2017). *Group dynamics for teams*. Sage.

Marzano, R., Pickering, D., & Pollock, J. (2001). *Classroom instruction that works*. ASCD.

Mautz, S. (2017). Psychology and neuroscience blow-up the myth of effective multitasking. https://scottmautz.com/tag/multitasking/

McBride, B. (2004). Data-driven instructional methods: "One-strategy-fits-all" doesn't work in real classrooms. *T.H.E Journal, 31*(11), 38-40.

McClure, L., Yonezawa, S., & Jones, M. (2010). Can school structures improve teacher-student relationships? The relationship between advisory programs, personalization and students' academic achievement. *Education Policy Analysis Archives*, *18*(17).

Meckler, L., Strauss, V., & Heim, J. (2020). Millions of public school students will suffer from school closures, education leaders have concluded. *Washington Post*. https://www.washingtonpost.com/local/education/online-learning-summer-school-coronavirus/2020/04/11/de11c278-7adc-11ea-a130-df573469f094_story.html

National School Reform Faculty (NSRF). (2015). Tuning protocol. Critical Friends Group. https://nsrfharmony.org

Neiterman, E., & Zaza, C. (2019). A mixed blessing? Students' and instructors' perspectives about off-task technology use in the academic classroom. *The Canadian Journal for the Scholarship of Teaching and Learning*, *10*(1).

Newport, C. (2016). *Deep work: Rules for focused success in a distracted world*. Grand Central Publishing.

Northouse, P. G. (2019). *Leadership: Theory and practice* (8th ed). Sage.

Qian, Y., & Li, L. (2017). Student off-task electronic multitasking predictors: Scale development and validation. *Journal of the Scholarship of Teaching and Learning*, *17*(2), 53–73.

Rosen, C. (2008). The myth of multitasking. *The New Atlantis*, *20*, 105–110. https://www. thenewatlantis.com/publications/the-myth-of-multitasking

Rothstein, R. (2020). The coronavirus will explode achievement gaps in education. Shelterforce.org. https://shelterforce.org/2020/04/13/the-coronavirus-will-explode-achievement-gaps-in-education/

Subban, P. (2006). Differentiated instruction: A research basis. *International Education Journal, 7*(7), 935-947.

Sweller, J., van Merriënboer, J. J. G., & Paas, F. (2019). Cognitive architecture and instructional design: 20 years later. *Educational Psychology Review 31,* 261–292.

Tindell, D. R., & Bohlander, R W. (2012). The use and abuse of cell phones and text messaging in the classroom: A survey of college students. *College Teaching*, 60(1), 1-9.

Tomlinson, C. A. (2000). Differentiated instruction: Can it work? *Education Digest*, *65*(5), 25.

Tomlinson, C. A., & Dockterman, D. (2002). Different learners different lessons. *Instructor*, *112*(2), 21.

Tracy, S. J. (2010). Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qualitative Inquiry, 16*(10), 838-851.

Twenge, J. M. (2017). *iGen: Why today's super-connected kids are growing up less rebellious, more tolerant, less happy--and completely unprepared for adulthood.* Simon and Schuster.

Ward, A. F., Duke, K., Gneezy, A., & Bos, M. W. (2017). Brain drain: The mere presence of one's own smartphone reduces available cognitive capacity. *Journal of the Association for Consumer Research, 2*(2), 140–154.

Wormeli, R. (2017). *Fair isn't always equal: Assessment & grading in the differentiated classroom* (2nd ed.). Stenhouse.

SECTION SIX: SCHOLARLY PRACTITIONER REFLECTION

Influence on Educational Leadership

The dissertation process has been a challenging and liberating culmination of a life-changing program. One broad goal I had for myself and my study was to legitimize my position as teacher as someone who leads. The dissertation process has accomplished this goal by helping me gain perspective, solidifying my belief in collaboration, and clarifying the need for intentional and careful focus to effect real change in education.

Perspective

When I think back on my decision to start this EdD program, I am reminded of the reasons why I made the leap. I knew that I had indeed pushed myself to continually learn and grow in my profession, but I also looked critically at my lapse in time of technically being an enrolled student. I took on the trial of another degree to push myself in a more intentional, larger-scale way. Knowles (1975) stated that adult learners draw from their own experiences for learning, that they become ready to learn as they experience a need to learn in their own circumstances, and that their motivation to learn comes from a concern to immediately apply the knowledge. Merriam (2001) articulated the goal of self-directed learning as oriented toward "emancipatory learning and social action" (p. 9). These descriptors fit me and my environment. My context of the classroom became the foundation of my dissertation, so I indeed drew from my experiences to inform my study, and now, on the other side of the research, data collection, and analysis, I am ready to apply my findings to my life's work by sharing with my colleagues and principals. In this way the dissertation process, with its demands and depth, have broadened my perspective and potential influence.

As mentioned in the design of my study, Mertens (2020) stated that phenomenological studies must "understand and describe" the phenomenon, which in my case is classroom leadership, "from the point of view of the participant" (p. 255). My dedication to learn the subjective experience of the teachers, principals, and students was a deliberate process that yielded deep understanding beyond my singular perspective. Ettling (2012) spoke of "new levels of awareness" in terms of transformative leaders, emphasizing the importance of introspection into both self and environment. The dissertation process has unquestionably given me new dimensions of awareness of myself and my environment. In all, my greater perspective is summed up nicely with a statement from Taylor (2009): "A greater life experience provides a deeper well from which to draw on and react to as individuals engage in dialogue and reflection" (p. 6). Dialogue and reflection were the essential components to this whole process.

Collaboration

The dissertation process most certainly taught me that leading requires first truly joining a community and learning from others. Bruffee's (1999) first step in educational collaboration is the goal of joining an inclusive community of knowledgeable peers. Bruffee explained that for these communities to work, those involved must not only accept the authority of their peers, but also have courage to accept their own authority granted by their peers. Valuing conversation with peers is also echoed by Charan (2001/2013) who defined dialogue as "the basic unit of work in an organization" (p. 58). I have always believed this in my classroom, but what I see more clearly is the essential role dialogue should play in leading teachers. My lengthy interviews with fellow teachers were edifying, and I remain struck by the depth of understanding I gained from

sustained serious conversation with my peers. Bruffee (1999) also said "if the talk within the knowledge communities we are members of is narrow, superficial, biased, or limited to cliches, our thinking is almost certain to be so, too" (p. 134), and this is what the dissertation process urged me to do. Not only did I engage in deep conversation with peers, but I also had meaningful conversation with principals and students. Before that, the conversation began with the literature review and the discussions with fellow students imagining a research question that could spur an entire study. Now, by doing the work of data analysis of all those stories from teachers and conversations with a broad audience, I am prepared to contextualize and synthesize for my fellow teachers and building leadership.

Deliberate Intentions

Another important aspect of my study I will take with me as an educational leader is the necessity of deliberate, deep, and careful planning of any meaningful change in policy or practice. This deliberate preparation relates specifically to my content in that it must be carefully and strategically focused as well as enhanced by feedback (Newport, 2016). I followed these guidelines with the required focus of the dissertation process as well as the feedback on the material from my advisor, Dr. Macgregor, my dissertation support group of fellow EdD students, and the many participants I engaged with during my process of data collection and analysis.

In terms of continually evaluating and embracing the many voices in my qualitative data, I am reminded of Dahler-Larsen (2018) who emphasized the value of Janus variables, which work two ways. Dahler-Larsen elaborated on theory-based evaluation and encouraged cultivating ambiguity to gain sophistication, aiming toward

"enlightenment and deliberation" (p. 20). Conceptually, embracing the ambiguities in the various stories my qualitative data offered, led me to a more sophisticated understanding. My deliberate analysis took many hours, but it was fruitful. I have learned that it takes time to see the full picture, and thorough analysis and deliberate intention must precede any proposal for change.

Finally, to echo my initial endorsement of a hunger for perspective and connection, I have also learned that it must be tempered with a discerning eye. Heifetz and Lauri (1996/2011) called disciplined attention the "currency of leadership" (p. 67). It is not enough to be deeply knowledgeable of my environment and craft. I also have to see how the knowledge can inform leadership. For me, this translates to better leadership decisions in my classroom, but it also translates to my having a more active role in building leadership. The dissertation process has already helped me make more meaningful connections with administrative leadership, so I plan to continue to pursue joining that team in an effort to make the overall building leadership more balanced. Ancona, et al. (2007/2011) defined a well-balanced team as one that leaders who make up for their missing skills by relying on others. I have learned that I have missing skills in terms of building leadership and broad policy implementation, but I have also learned that my classroom perspective compliments a leadership team who no longer works in classroom.

Influence as a Scholarly Practitioner

Early in the program, I read the goal of the program as stated by MacGregor and Fellabaum (2016): "to transform doctoral students into change agents in their professional roles as educational leaders" (p. 67). The coursework most certainly upheld

this goal by enhancing knowledge on educational practice and scholarly research. The program and dissertation process made clear how important quality research is, both in collecting and interpreting the information.

The dissertation process has made me more scholarly. Before the program, I spent lessons teaching researching techniques, but this program and its culminating dissertation far surpassed what my previous academic programs and secondary teaching requirements offered. A true scholarly practitioner, as the CPED Consortium contends, "must possess strong research and inquiry skills to be able to address complex problems of practice" (Perry, 2016, p. 303). The serious and rigorous research requirements of my lengthy scholarly literature review allowed me to strengthen my research skills and revealed the many levels to quality research. The dissertation began with a research question, following the practice of Inquiry, which Perry (2016) cited with the CPED (2011) definition as "the process of posing significant questions that focus on complex problems of practice and using data to understand the effects of innovation. As such, inquiry of practice requires the ability to gather, organize, judge, aggregate, and analyze situations, literature, and data with a critical lens" (p. 306). The dissertation process facilitated all these goals for me, not just for my subject, but for the many studies I came across that represented others' inquiries and research.

Another scholarly aspect the dissertation process has influenced has been my inclination and ability to question decisions made by myself and by district decision-makers. When justifying decisions, teachers/leaders must not only provide reasons for their claims; they must also support with evidence (Booth et al., 2016). The dissertation process gave me an opportunity to initiate original data and search for meaning. My own

work resulted in a greater understanding of my topic, of course, but importantly, having to carry out the entire process alone enlightened me in a way reading about it could not. I now can imagine more realistically the scope of large research studies. I can appreciate the hours of interpreting transcripts. I can also see how even if your results are not brand-new information, the effort is not wasted because we must continually verify our beliefs. I knew, for example, that teacher/student relationships were important. Nevertheless, my research allowed me to see the concept from other authentic experiences, and analyzing my data helped me arrive a clearer, more nuanced understanding.

I will continue to keep in mind, as well, the complex nature of the scholarly research process in terms of how Dey (1993) articulated researchers' observations as "concept-laden abstractions from the flow of experience" (p. 20), and Dey warned of considering our observations as independent from our conceptual frameworks. These ideas are complex and help describe some of the mental work I did while analyzing my data and considering how to categorize my findings. Having experienced data analysis with groups throughout the coursework and alone during the dissertation process, I more fully appreciate the analogy put forth by Dey (1993): "This climb, with its circuitous paths, its tangents and apparent reversals, and its fresh vistas, reflects the creative and non-sequential character of the analytic process" (p. 54). Dey concluded by stating this process is slow but rewarding, and that has also been my experiences of climbing the winding path of this dissertation trek.

From a scholarly standpoint, I also have gained insight about the quality of data others provide. Not only does data need to be sound, but as Booth et al. (2016) stated,

once leaders demonstrate they have relevant data, we still need to be convinced of the *relevancy* of the truth. This concept speaks to making proper connections and conclusions within a given context. As an improved scholarly practitioner, I am now more prepared to offer helpful criticism, even if it is contrary to opinion of my particular group. Levi (2017, p. 188) explained that "group cohesiveness encourages groupthink by creating an environment that limits internal dissension and criticism." As a teacher, there is a natural solidarity of teachers as separate from administration, but there is a kind of healthy dissent that I am now more prepared to engage in. If I am better informed, I should be a part of decision making, which Shapiro and Stefkovich (2016) stated requires multiple voices.

Concluding Statement

I have always loved school, and though admittedly I am weary at the end of this most intense of my schooling endeavors, I feel grateful for the wealth of scholarship and friendship this program has afforded me. Having strong leadership traits alone is not enough: adapting traits to fit particular situations is essential, as well as sociability (Northouse, 2019; Zaccaro; 2007). I have learned how adapting my personality and leadership traits along with cultivating technical, human, and conceptual skills, as outlined by Northouse (2019), paves the path for better leadership. I see myself as an authentic leader who has a sense of purpose, and my interaction with my followers, usually my students but certainly others, is where authentic leadership emerges (Northouse, 2019). I know, from experience and my own data collection, that goals in the complex landscape of education can only be met by people working together through dialogue and reflection. Nonaka (1994) elaborated on the illuminating power of multiple

contexts of knowledge, and that is at the heart of what my studies have revealed to me: progress and enlightenment cannot come from isolation; I must push myself to learn all of the facets of educational leadership and policy analysis in order to see the whole picture and participate in the dynamic creation of knowledge. I want to be a contributing member of a knowledge-creating organization, to be a part of the circular process of acquiring and creating new knowledge (Nonaka, 1994). I connect deeply with Nonaka's concept of the hypertext organization that requires "switch[ing] between various contexts of knowledge creation to accommodate changing requirements from...both inside and outside the organization" (p. 32). My goal is to contribute to an educational system that fosters knowledge creation even in the face of changing goals. I aim to help push my organization to meet the balance Nonaka articulated between efficiency and dynamism.

Finally, to draw once more from the controlling metaphor of my study, teacher as cartographer, I would like to end with a quote from author John Green who remarked in his TED Talk "The Nerd's Guide to Learning Everything Online," that not only does our world shape our maps, but the way we create our maps also shapes the world. Green (2012) said he revels in joining curious-minded people and "feeling the excitement of being part of a community of learners." I too feel most at home in such a community, and I will continue to endeavor to be a part of "a community of people who are engaged together in the cartographic enterprise of trying to better understand and map the world around us." Here's to maps and adventure.

References

Adamczyk, M., Adamczyk, A., & Tłuściak-Deliowska, A. (2017). Using mobile phones by young people: The trends and risk of addiction. *Psycho-Educational Research Reviews*, *7*(1), 29 –. Retrieved from https://www.journals.lapub.co.uk/index.php/perr/article/view/190

Ancona, D., Malone, T. W., Orlikowski, W. J., & Senge, P. M. (2011). In praise of the incomplete leader. In HBR's *On Leadership* (pp. 179-196), Harvard Business Review. (Reprint R0702E, originally published in February 2007).

Alanazi, T., Khalaf, B., & Rasli, A. (2013). Overview of path-goal leadership theory. *Jurnal Teknologi (Social Sciences), 64*(2), 49-53. Penerbit UTM Press.

Alavi, S. S., Ferdosi, M., Jannatifard, F., Eslami, M., Alaghemandan, H., & Setare, M. (2012). Behavioral addiction versus substance addiction: Correspondence of psychiatric and psychological views. *International Journal of Preventive Medicine, 3*(4), 290–294.

American Educational Research Association (AERA). (2021). *Sage Journals*. https://journals.sagepub.com/home/ero

Anderson, T. C. (2020). Academics, achievement gap, and nutritional health: The impact of coronavirus on education. *Delta Kappa Gamma Bulletin, 87*(1), 14-17.

Baker, G. A., Roueche, J. E., & Gillett-Karam, R. (1990). *Teaching as leading: Profiles of excellence in the open-door college*. The Community College Press.

Bell, J. D., Blanco, C., Burdman, P., Callan, P., Chen, M., Colvin, R., Cowell, R., Dubois, G., Edwards, V., Ewell, P., Finny, J., Jones, S., Keller, H., Kime, S., Kirst, M., Kirwan, W., Kress, S., Lingenfelter, P. Lyons, J. E.,...Nettles, M. (2010). Beyond the rhetoric: Improving college readiness through coherent state policy. The National Center for Public Policy and Higher Education & The Southern Regional Education Board. https://www.highereducation.org/reports/college_readiness/CollegeReadiness.pdf

Bickle, J. T. (2017). Developing remote training consultants as leaders-dialogic/network application of path-goal leadership theory in leadership development. *Performance Improvement*, *56*(9), 32–39.

Bjork, E., & Bjork, R. (2011). Making things hard on yourself, but in a good way: Creating desirable difficulties to enhance learning. *Psychology and the real world: Essays illustrating fundamental contributions to society.* pp. 56-64.

Bjork, R. A., Dunlosky, J., & Kornell, N. (2013). Self-regulated learning: Beliefs, techniques, and illusions. *Annual Review of Psychology*, 64, 417-44.

Bolman, L. G., & Deal, T. E. (2017). *Reframing organizations: Artistry, choice, and leadership* (6th ed.). Jossey-Bass.

Booth, W. C., Colomb, G. G., & Williams, J. M. (2016). *The craft of research* (4th Ed). University of Chicago Press.

Bruffee, K. A. (1984). Collaborative learning and the conversation of mankind. *College English*, *46*(7), 635-652. National Council of Teachers of English.

Bruffee, K. A. (1999). *Collaborative learning: Higher education, interdependence, and the authority of knowledge* (2nd ed.). John Hopkins University Press.

Charan, R. (2013). Conquering a culture of indecision. In *HBR's On Making Smart Decisions* (pp. 57-73), Harvard Business Review. (Reprint R0601J, originally published in April 2001).

Cheong, P. H., Shuter, R., & Suwinyattichaiporn, T. (2016). Managing student digital distractions and hyperconnectivity: Communication strategies and challenges for professorial authority. *Communication Education*, *65*(3), 272–289.

Christensen, D. (2020). If you're trying to be productive, stop multitasking. *ONS Voice*, *35*(7), 28.

Clear, J. (n.d.). The beginner's guide to deliberate practice. Retrieved on July 1, 2021 from https://jamesclear.com/beginners-guide-deliberate-practice

Common Sense Media (2015). Landmark report: U.S. teens use an average of nine hours of media per day, tweens use six hours. https://www.commonsensemedia.org/about-us/press-releases/landmark-report-us-teen-use-an-average-of-nine-hours-of-media-per-day

Conderman, G., Ikan, P. A., & Hatcher, R. E. (2000). Student-led conferences in inclusive settings. *Intervention in School & Clinic*, *36*(1), 22.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches.* (3rd ed.). Sage.

Dahler-Larsen, P. (2018). Theory-based evaluation meets ambiguity: The role of janus variables. *American Journal of Evaluation, 39*(1) 6-23. Sage.

Department of Elementary and Secondary Education (DESE). (2021). Data Dashboard: Student Statistics. https://apps.dese.mo.gov/MCDS/Visualizations.aspx?id=22

Department of Elementary and Secondary Education (DESE). (2021). Missouri Learning Standards. https://dese.mo.gov/college-career-readiness/curriculum/missouri-learning-standards

Dey, I. (1993). *Qualitative data analysis: A user friendly guide for social scientists*. Routledge.

Dixon, M. L., & Hart, L. K. (2010). The impact of path-goal leadership styles on work group effectiveness and turnover intention. *Journal of Managerial Issues, 22*(1), 52-69.

Drysdale, L., & Gurr, D. (2017). Leadership in uncertain times. *International studies in educational administration (Commonwealth Council for Educational Administration & Management (CCEAM)*, *45*(2), 131–159.

Duncan, D., Hoekstra, A., & Wilcox, B. (2012). Digital devices, distraction, and student performance: Does in-class cell phone use reduce learning? *Astronomy Education Review*, *11*(1), 1–4.

Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, *100*(3), 363-406. https://doi.org/10.1037/0033-295X.100.3.363

Ericsson, K. A., & Pool, R. (2016). *Peak: Secrets from the new science of expertise*. Houghton Mifflin Harcourt.

Ericsson, K. A., Prietula, M. J., & Cokely, E. T. (2007). The making of an expert. *Harvard Business Review, 85*(7-8), 114–193.

Ettling, D. (2012). Educator a change agent: Ethics of transformative learning. In E. Taylor & P. Taylor (Eds.), *The Handbook of Transformative Learning: Theory, Research, and Practice* (pp. 536-547). Jossey-Bass.

Evans, M. G. (1970). Leadership and motivation: A core concept. *Academy of Management Journal*, *13*(1), 91–102. https://doi.org/10.2307/254928

Ewing Marion Kauffman Foundation. (2018). Visions of the future. https://www.kauffman.org/wp-content/uploads/2019/09/Visions-of-the-Future_v3.pdf

Fawcett, S. E., Giraud-Carrier, F. C., & Fawcett, A. M. (2020). Using deliberate practice to transform learning culture: Helping students put real skills in their OSCM toolbox. *Decision Sciences Journal of Innovative Education*, *18*(2), 172–202.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, *74*(1), 59–109.

French Jr., J. R. P., & Raven, B. (2005). The bases of social power. In J. M. Shafritz, J. S. Ott, Y. S. Jang (Eds.) *Classics of organization theory* (6th ed.) (pp. 311-320). Wadsworth. (Reprinted from *The bases of social power,* in D.P. Cartwright (Ed.) *Studies in Social Power,* pp. 150-167, by J.R.P French Jr. & B. Raven, 1959, Institute for Social Research, University of Michigan)

Glass, A. L., & Kang, M. (2019). Dividing attention in the classroom reduces exam performance, *Educational Psychology*, *39*(3), 395-408.

Goodwin, B. (2017). Personalization and failing forward. *Educational Leadership*, *74*(6), 80–81.

Green, J. (2012, November). *The nerd's guide to learning everything online*. TED Conferences. https://www.ted.com/talks/john_green_the_nerd_s_guide_to_learning_everything_online

Gumpert, M., & McConell, W. (2019). Different strokes for different folks. *Science and Children*, *57*(2), 62–70.

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.

House, R. J. (1971). A path-goal theory of leader effectiveness. *Administrative Science Quarterly*, *16*, 321-338.

House, R. J. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *Leadership Quarterly*, *7*(3), 323. https://doi.org/10.1016/S1048-9843(96)90024-7

House, R. J., & Mitchell, T. R. (1974) Path-goal theory of leadership. Journal of *Contemporary Business*, *3*, 81-97.

Jermier, J. M. (1996). The path-goal theory of leadership: A subtextual analysis. *Leadership Quarterly*, *7*(3), 311. https://doi.org/10.1016/S1048-9843(96)90022-3

Jiang, J. (2018). How teens and parents navigate screen time and device distractions. https://www.pewinternet.org/2018/08/22/how-teens-and-parents-navigate-screen-time-and-device-distractions/

Junior Achievement. (2013). Are students prepared for the workplace? New tools for a new generation. Summit on Work and Career Readiness. https://www.juniorachievement.org/documents/20009/20652/Are+Students+Prepared+for+the+Workplace.pdf/c1b75524-016d-4bd1-b8aa-74395f51021a

Keyes, T. S. (2019). A qualitative inquiry: Factors that promote classroom belonging and engagement among high school students. *School Community Journal, 29*, 171-200.

Knowles, M. S. (1975). Adult education: New dimensions. *Educational Leadership*, *33*(2), 85.

Koszewski, S. (1994). *An evaluation of customers' opinions of an academic advisory program for high school freshmen* (Master of Science Thesis). University of Houston.

Leroy, S. (2009). Why is it so hard to do my work? The challenge of attention residue when switching between work tasks. *Organizational Behavior and Human Decision Processes, 109*(2), 168-181. Elsevier.

Leroy, S., & Schmidt, A. (2016). The effect of regulatory focus on attention residue and performance during interruptions. *Organizational Behavior and Human Decision Processes, 137,* 218-235. Elsevier.

Levi, D. (2017). *Group dynamics for teams*. Sage.

MacGregor, C. J., & Fellabaum, J. (2016). Dissertation Redesign for scholarly practitioners in educational leadership: Increasing impact through dissemination-ready sections. In V. Storey & K. Hesbol (Eds.), *Contemporary approaches to dissertation development and research methods.* IGI Global.

Malik, S. H., Aziz, S., & Hassan, H. (2014). Leadership behaviour and acceptance of leaders by subordinates: Application of path goal theory in telecom sector. I*nternational Journal of Trade, Economics and Finance, 5*(2), 170-175.

Marzano, R., Pickering, D., & Pollock, J. (2001). *Classroom instruction that works*. ASCD.

Mautz, S. (2017). Psychology and neuroscience blow-up the myth of effective multitasking. https://scottmautz.com/tag/multitasking/

McBride, B. (2004). Data-driven instructional methods: "One-strategy-fits-all" doesn't work in real classrooms. *T.H.E Journal, 31*(11), 38-40.

McClure, L., Yonezawa, S., & Jones, M. (2010). Can school structures improve teacher-student relationships? The relationship between advisory programs, personalization and students' academic achievement. *Education Policy Analysis Archives*, *18*(17).

Meckler, L., Strauss, V., & Heim, J. (2020). Millions of public school students will suffer from school closures, education leaders have concluded. *Washington Post*. https://www.washingtonpost.com/local/education/online-learning-summer-school-coronavirus/2020/04/11/de11c278-7adc-11ea-a130-df573469f094_story.html

Merriam, S. B., & Bierema, L. L. (2014). *Adult learning: Linking theory and practice.* Jossey-Bass.

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.

Mertens, D. M. (2020). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (5th ed.). Sage.

Moeller, J. (1968). Bureaucracy and teachers' sense of power. *The School Review, 72*(2), 137-157.

National Center for Educational Statistics (NCES). (2017-18). Digest of educational statistics. https://nces.ed.gov/programs/digest/d19/tables/dt19_219.46.asp

National School Reform Faculty (NSRF). (2015). Tuning protocol. Critical Friends Group. https://nsrfharmony.org

Neiterman, E., & Zaza, C. (2019). A mixed blessing? Students' and instructors' perspectives about off-task technology use in the academic classroom. *The Canadian Journal for the Scholarship of Teaching and Learning*, *10*(1).

Newport, C. (2016). *Deep work: Rules for focused success in a distracted world*. Grand Central Publishing.

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science, 5*(1), pp. 14-37.

Northouse, P. G. (2019). *Leadership: Theory and practice* (8th ed). Sage.

Olowoselu, A., Mohamad, M. bin, & Aboudahr, S. M. F. M. (2019). Path-goal theory and the application in educational management and leadership. *Education Quarterly Reviews*, *2*(2), 448–455.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Sage.

Public School Review. (2021). Glendale High School. https://www.publicschoolreview.com/glendale-high-school-profile/65804

Qian, Y., & Li, L. (2017). Student off-task electronic multitasking predictors: Scale development and validation. *Journal of the Scholarship of Teaching and Learning*, *17*(2), 53–73.

Rock, M., Gregg, M., Ellis, E., & Gable, R. A. (2008) REACH: A framework for differentiating classroom instruction. *Preventing School Failure, 52*(2), 31-47).

Rosen, C. (2008). The myth of multitasking. *The New Atlantis*, *20*, 105–110. https://www. thenewatlantis.com/publications/the-myth-of-multitasking

Rothstein, R. (2020). The coronavirus will explode achievement gaps in education. Shelterforce.org. https://shelterforce.org/2020/04/13/the-coronavirus-will-explode-achievement-gaps-in-education/

Rutherford, S. (2020). Using desirable difficulty concepts to enhance durable learning in design education. *Art, Design & Communication in Higher Education*, *19*(1), 65–79.

Springfield Public Schools (SPS). (2021). Springfield Student Handbook. https://docs.google.com/document/d/16uN63lO9zUxnQ4h4Ow_2xFagxvcJRNjdVpel2dTw-jE/edit

Seidman, I. (2019). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (5th ed.). Teachers College Press.

Shapiro, J. P. & Stefkovich, J. A. (2016). Part I: Practice and paradigms in the study of ethics. Routledge.

Subban, P. (2006). Differentiated instruction: A research basis. *International Education Journal, 7*(7), 935-947.

Sweller, J., van Merriënboer, J. J. G., & Paas, F. (2019). Cognitive architecture and instructional design: 20 years later. *Educational Psychology Review 31,* 261–292.

Taylor, E. W. (2009). Fostering transformative learning. In J. Mezirow & E. W. Taylor (Eds.), *Transformative Learning in Practice: Insights from Community, Workplace, and Higher Education*. (pp. 3-15). Jossey-Bass.

Tindell, D. R., & Bohlander, R W. (2012). The use and abuse of cell phones and text messaging in the classroom: A survey of college students. *College Teaching*, 60(1), 1-9.

Tomlinson, C. A. (2000). Differentiated instruction: Can it work? *Education Digest*, *65*(5), 25.

Tomlinson, C. A., & Dockterman, D. (2002). Different learners different lessons. *Instructor*, *112*(2), 21.

Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry, 16*(10), 838-851.

Twenge, J. M. (2017). *iGen: Why today's super-connected kids are growing up less rebellious, more tolerant, less happy--and completely unprepared for adulthood.*

United States Census Bureau. (2021). Quick facts. https://www.census.gov/quickfacts/fact/table/springfieldcitymissouri/PST045219

Vroom, V. H. (1964). *Work and motivation*. Jossey-Bass.

Wedell-Wedellsborg, T. (2017). Are you solving the right problems? *Harvard Business Review, 95*(1), 76-83.

United States Census Bureau. (2021). Quick facts. https://data.census.gov/cedsci/table?tid=ACSST5Y2019.S1701&g=1600000US2970000

Wormeli, R. (2017). *Fair isn't always equal: Assessment & grading in the differentiated classroom* (2nd ed.). Stenhouse.

Yukl, G. A. (2002), *Leadership in Organizations*. Prentice Hall.

Zaccaro, S. J. (2007). Trait-based perspectives of leadership. *American Psychologist, 62*(1), 6–16.

Appendix A: Email Recruitment Script for Teacher Participants

Good morning, fellow teachers.

As most of you already know, I am in the final phase of my doctorate studies through the University of Missouri. The important final step is conducting original research, and that is where you, my friends and colleagues, come in.

I plan to conduct a qualitative study right here at Glendale High School where I will gather real stories, struggles, and strategies from teachers. Are you willing to be a part of my study?

If you're willing to devote some time to reflecting and sharing with both me and fellow teachers, I will do my best to make it worth your valuable time. I will ask each teacher participant to take part in a focus group and a small-group interview. Additionally, I will ask you to share one teaching artifact, a protocol or assignment you already use in your classroom.

My study will run approximately from December through the first week in March. If you would like the extended (and detailed) version of this invitation, please open the attachment. I most certainly value your time, so if you cannot commit to participating, that is okay. Either way, however, please respond to this email with a yes or no.

Most sincerely,

Keely Scott

Appendix B: Email Recruitment Attachment of Study Details

(Long-Form Participant Invitation)

Dear Colleagues,

I am currently working toward earning the degree of Doctor of Educational Leadership and Policy Analysis through the University of Missouri. I am in my final stages of planning and conducting original research, and I intend to create a group of participants made up of teachers who are especially good leaders in their classrooms. I am writing to each of you because I respect your craft and sincerely hope you will agree to participate in my research.

The focus of my research arises from a problem teachers wrestle with daily: High school students need help overcoming obstacles to learning, particularly distractions; therefore, teachers need teaching strategies to help clear paths to learning.

The goal of my study is to provide space and structure to reflect on imagining teachers as both cartographers and guides. How can teachers create maps to success and lead all students to learning? I believe we can answer those questions together. Additionally, I aim to focus especially on clearing the path of distractions to promote deep work. What strategies do teachers employ that are especially effective in increasing student focus?

If you agree to join my team of teacher participants, my study aims to answer the above questions. The official research question of my study is *As perceived by high school teachers and their students, how do teachers facilitate the concept of deep work to lead students to learning goals by maintaining four essential priorities as outlined by path-goal theory, namely (a) defining goals, (b) clarifying the path, (c) removing obstacles, and (d) providing support?*

Agreeing to be a participant in this study will demand some time from you. Specifically, the process would ask you to participate in the following **three responsibilities**:

1. **Focus Group**, to be held face-to-face at Glendale High School
    1. This round table discussion will last no more than 90 minutes. I will facilitate a discussion regarding the foundation of my research, including information regarding Path-Goal Leadership Theory and Cognitive Load Theory. I have two handouts that will help contextualize these theories. Mostly, the time will be devoted to the group answering questions about their current practices regarding how teachers guide students to learning.
2. **Small-Group Interviews**, to be held at GHS 2 to 4 weeks after the focus group
    1. These interviews will include 2 to 3 teacher participants and will last no more than 50 minutes. I will ask teachers to share specific teaching strategies teachers find efficacious.

3. **Share a Teaching Artifact**, can be emailed to me or place in my mailbox in the main office
    1. In order to gather practical and concrete examples of effective teaching strategies, I will ask each teacher participant to share a teaching artifact that exemplifies how they lead students to learning goals. The artifact might be an essay assignment, a research project, a calendar plan for a unit, a handout of guidelines for a class activity, etc. A brief note of contextual explanation from the teacher would be appreciated.

I know that each of you have multiple demands of your time and energy, and so please know that I will do my best to not only stick to my time frames above, but I will also endeavor to make the experience worth your time professionally and personally. Nevertheless, you may be in a position where you cannot add another responsibility to your workload. If that is the case, please email me back with a simple *No thank you*. I understand.

If, however, you are willing to join me, please respond to this email stating your acceptance as well as any further questions about the research. By responding yes, you will consent to participation and audio recording of both a focus group and a small-group interview. The audio and transcripts will be used only by me, names in my dissertation will be replaced with pseudonyms, and the information will be deleted after one year.

Sincerely,

Keely Scott

Appendix C: Informed Consent Documents

Adult Consent to Participate in a Research Study: Teachers and Principals

Project Title: A QUALITATIVE STUDY OF TEACHERS AS PATH-GOAL LEADERS WITH AN EMPHASIS ON CLEARING THE PATH OF DISTRACTION

Principal Investigator/Researcher: Keely Scott
Researcher contact information: kescott@spsmail.org
IRB Reference Number: 2082082

You are being invited to take part in a research project. You must be 18 years of age or older. Your participation is voluntary, and you may stop being in this study at any time. The purpose of this research project is to study teachers as leaders in their classrooms and to discover the most effective teaching strategies to lead students to learning goals. As a teacher participant, you are being asked to participate in a 90-minute focus group, a small-group interview that will last up to an hour, and to share a teaching artifact. As an assistant principal participant, you will be asked to participate in an hour-long small-group interview. The information you provide will be kept confidential and only the researcher, Keely Scott, will have access to your names.

If you have questions about this study, you can contact the University of Missouri researcher at 573-465-1993 or kescott@spsmail.org. If you have questions about your rights as a research participant, please contact the University of Missouri Institutional Review Board (IRB) at 573-882-3181 or muresearchirb@missouri.edu. The IRB is a group of people who review research studies to make sure the rights and welfare of participants are protected. If you want to talk privately about any concerns or issues related to your participation, you may contact the Research Participant Advocacy at 888-280-5002 (a free call) or email muresearchrpa@missouri.edu.

You can ask the researcher to provide you with a copy of this consent for your records, or you can save a copy of this consent if it has already been provided to you. I appreciate your consideration to participate in this study.

Guardian/Parent Consent to Participate in a Research Study

Project Title: A QUALITATIVE STUDY OF TEACHERS AS PATH-GOAL LEADERS WITH AN EMPHASIS ON CLEARING THE PATH OF DISTRACTION
Principal Investigator/Researcher: Keely Scott
IRB Reference Number: 2082082

Your child is being invited to take part in a research project. As the guardian, you must be 18 years of age or older. Your child's participation is voluntary, and you and/or your child may stop your child's participation in this study at any time. The purpose of this research project is to discover effective teaching strategies from teachers, so your child will be asked to share strategies, decisions, and activities they view as helpful to their learning process. Your child's participation should last up to 20 minutes. The brief interview will take place during Intervention time, so your child will not be expected to miss any class time. The information your child provides will be kept confidential and only the researcher, Keely Scott, will have access.

If you have questions about this study, you can contact the University of Missouri researcher at 417-523-8900 or kescott@spsmail.org. If you have questions about your child's rights as a research participant, please contact the University of Missouri Institutional Review Board (IRB) at 573-882-3181 or muresearchirb@missouri.edu. The IRB is a group of people who review research studies to make sure the rights and welfare of participants are protected. If you want to talk privately about any concerns or issues related to your child's participation, you may contact the Research Participant Advocacy at 888-280-5002 (a free call) or email muresearchrpa@missouri.edu.

You can ask the researcher to provide you with a copy of this consent for your records, or you can save a copy of this consent if it has already been provided to you. I appreciate your consideration to allow your child to participate in this study.

Consent to Be in a Research Study: Student (Under 18)

Project Title: A QUALITATIVE STUDY OF TEACHERS AS PATH-GOAL LEADERS WITH AN EMPHASIS ON CLEARING THE PATH OF DISTRACTION

Principal Investigator/Researcher: Keely Scott
IRB Reference Number: 2082082

You are being asked to be in a research project. You do not have to be in this project if you don't want to. You can stop at any time and neither I nor your teacher will be upset.

The reason why I am doing this project is because I want to discover the best teaching strategies for leading students to learning.

You are being asked to share some strategies, decisions, and/or activities you find especially helpful to your learning. It will take about 15 to 20 minutes of your time during Intervention. The information you share will be private. Only I will know what you personally said. If I share your answers, I will not use your name.

If you have questions about this project, you can contact me at 417-523-8900 or kescott@spsmail.org. You can also ask your parents if you have questions about this project because they said it was okay for you to be in the study. You can still say you don't want to be in the study and that is fine.

Additional Information Provided With Consent Forms

WHY IS THE RESEARCHER CARRYING OUT THIS STUDY?

The researcher wants to better understand how teachers can help high school students overcome obstacles to learning, particularly distractions. The researcher hopes to gain insight into the art of teaching and experience of students in order to arrive at improved teaching strategies that will benefit both teachers and students.

HOW LONG WILL I BE IN THIS STUDY?

The present study will take place over the course of the spring semester of the 2022 academic school year.

- Teacher participants will be asked to participate in a focus group, respond electronically to reflective questions, and participate in an interview with the researcher.
- Assistant principals will be asked to participate in a small-group interview.
- Student participants will be asked to participate in a 25-minute interview.

HOW MANY PEOPLE WILL BE THE STUDY?

The study aims to include 5 to 10 teachers, 2 assistant principals, and at least 10 students.

WHAT ARE THE BENEFITS OF BEING IN THE STUDY?

Your participation will benefit the knowledge and teaching culture at Glendale High School. The present study seeks to benefit both teachers and students.

WHAT ARE THE RISKS OF BEING IN THE STUDY?

Your participation in the study is not expected to cause you any risk greater than those encountered in everyday life. You will be asked to share personal experiences in the context of teaching and learning.

Your participation and contribution to the present study is in no way tied to your evaluation as a teacher or student. If you decide not to participate, or if you decide to stop participating before the study is over, there are no adverse consequences.

CONFIDENTIALITY & PRIVACY

The researcher is required to address how the confidentiality of the participants will be maintained. Your name will remain confidential at every step of the study.

- Your name and identifying information, other than your position, such as teacher/student and grade level, will not be given to anyone.
- Only the researcher (Keely Scott) will have access to the data with names from this study, and the data will be kept in secure locations. Courtney Brown,

Glendale Learning Specialist, will have access to some transcripts to analyze trends, but she will not have access to any names.

Participants in this study will be asked to refrain from sharing names and identifiable information of students and teachers to protect privacy and avoid FERPA violations.

WILL THE RESEARCHER TELL ME IF SOMETHING CHANGES IN THE STUDY?

Informed consent in an ongoing process that requires communication between the researcher and participants. The participant should understand what they are being asked to do so that they can make an informed decision about their option to participate. You will be informed of any new information discovered during the course of this study that might influence your health, welfare, or willingness to be in this study.

Appendix D: Paper Copy of Recruitment Script for Student Participants

Hello, Glendale Student.

My name is Keely Scott, and I am both a Glendale teacher and a current student at the University of Missouri. I am working on my final research project for my doctorate at Mizzou and am calling on the help of several GHS students.

For my research, I am interested in the ways the best teachers lead their students to learning. I am learning this from my fellow teachers, but to get an even clearer picture, I want to ask students about their opinions and experiences. If you are willing, I would like to chat with you during Intervention time and ask you questions about the things teachers do that help you stay organized, focused, and continually learning.

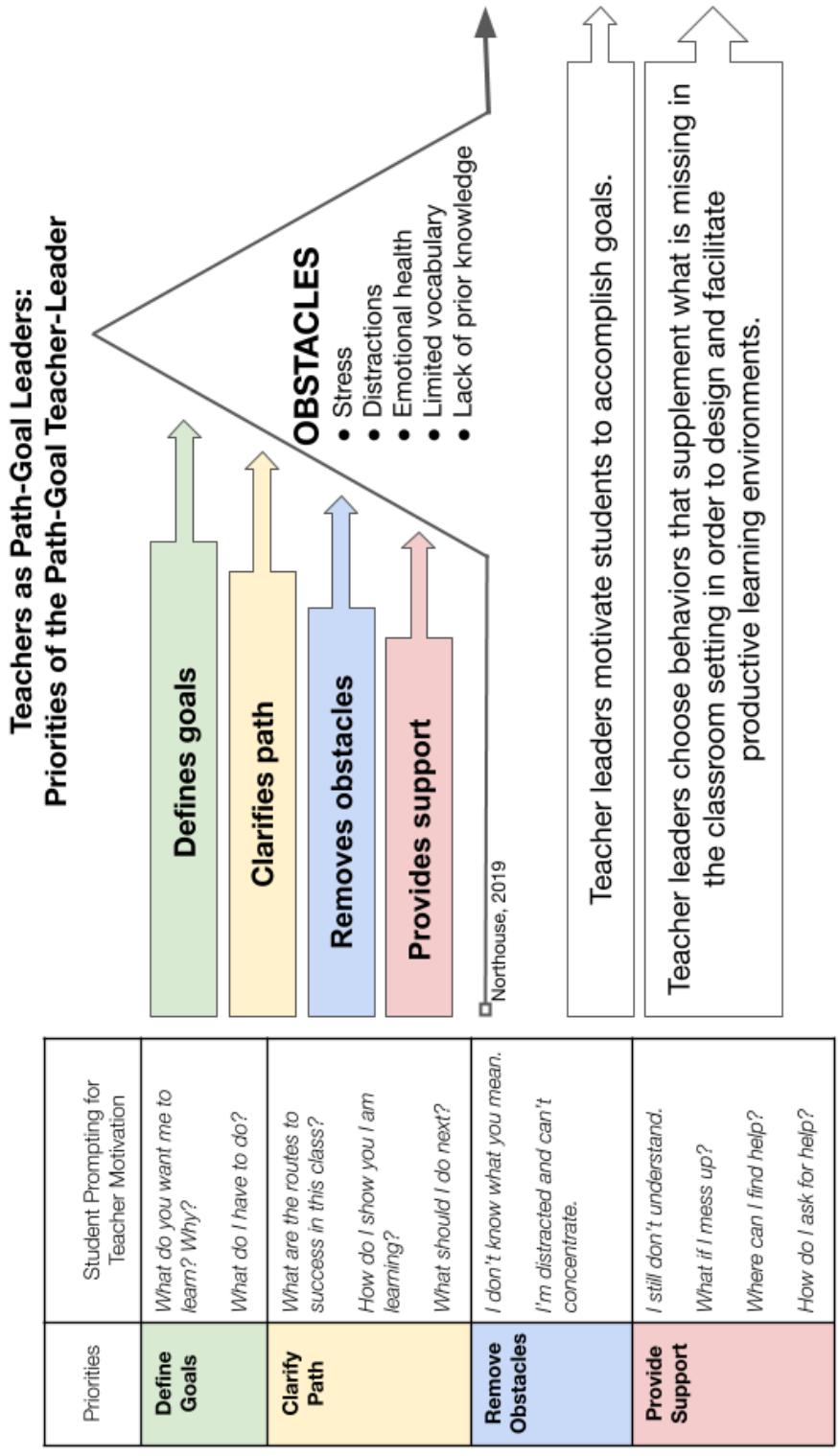
If you are willing to participate in a 10 to 20-minute interview during Intervention time in the GHS library, I would first need you to take home a statement of permission from your parent/guardian. Both you and your guardian must offer consent to participate and have the audio of the interview recorded. I will be the only person who hears the audio recording, and when I report the results of our conversation, your name will remain anonymous.

Please consider helping me out with collecting first-hand experiences from students currently in the classroom. **If you are willing, please ask your teacher to sign up on the Prospective Student Participant List I have provided them.** I will then follow up with you through your Intervention teacher. If you are not interested, you don't need to do anything.

Sincerely,

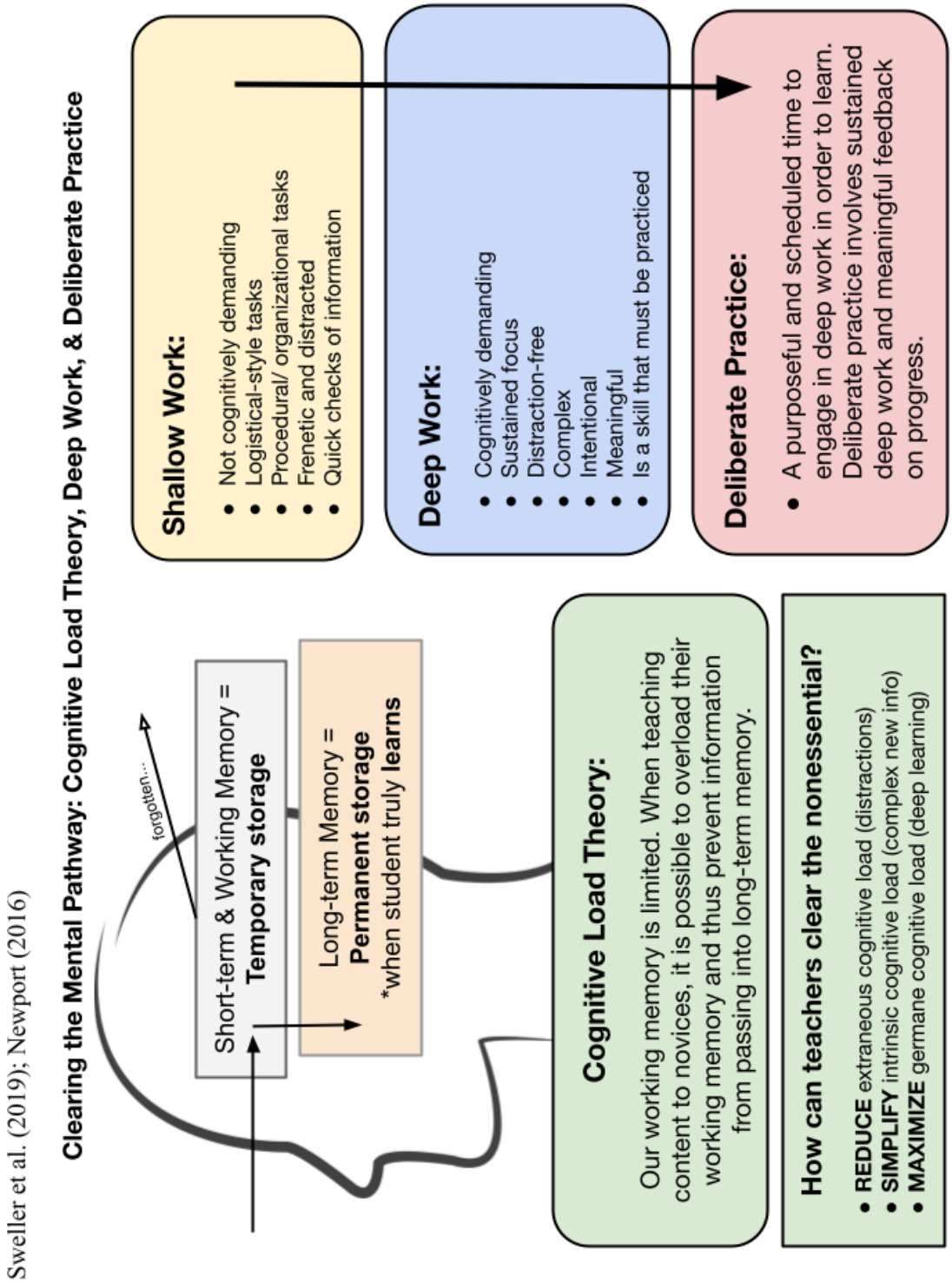
Keely Scott

Appendix E: Teacher Handout 1: Teachers as Path-Goal Leaders: Priorities of the Path-Goal Teacher-Leader



Priorities	Student Prompting for Teacher Motivation
Define Goals	*What do you want me to learn? Why?*
	What do I have to do?
Clarify Path	*What are the routes to success in this class?*
	How do I show you I am learning?
	What should I do next?
Remove Obstacles	*I don't know what you mean.*
	I'm distracted and can't concentrate.
Provide Support	*I still don't understand.*
	What if I mess up?
	Where can I find help?
	How do I ask for help?

Appendix F: Teacher Handout 2: Clearing the Mental Pathway: Cognitive Load Theory, Deep Work, and Deliberate Practice



Appendix G: Focus Group Protocol

1. **Welcome & Introduction**
    - **a.** It is imperative that I welcome and thank the group of teacher participants. They are offering their time and energy to my research, so I will open with a warm hello and thank you. I will also offer drinks and snacks, as well as pens and highlighters.
    - **b.** The teacher participants will already know me, but I will still need to provide a brief but thorough overview of the purpose of the focus group. Importantly, the focus group will provide an overview of my conceptual frameworks to the teacher participants. The purpose is not to teach them new strategies to employ, but rather to heighten their awareness of existing strategies. These teachers are already classroom leaders with various teaching strategies. The information discussed in the focus group, however, will focus our collective decision on the ways in which teachers maintain the path-goal priorities and employ certain facets of Cognitive Load Theory. The focus group will raise awareness and offer new vocabulary to assign to effective teaching practices.
    - **c.** In order to gather accurate descriptions of teacher participants, I will ask each teacher to fill out a demographics form that includes name, years of teaching experience, other careers before teaching (if applicable), list of courses currently teaching and if those courses are required.

2. **Distribution & Collection of Consent Forms**
    - **a.** I will distribute consent forms (Appendix B), and answer any clarifying questions, and collect them after participants sign.
3. **Distribution and Discussion of Teacher Handouts**
    - **a.** Teacher Handout 1 (Appendix D)
        - **i.** This handout offers a clear conceptual framework to help teacher participants see the priorities of Path-Goal leaders.
        - **ii.** This handout also provides student-centered questions, i.e., questions from a student point of view that align with Path-Goal Theory priorities.
    - **b.** Teacher Handout 2 (Appendix E)
        - **i.** This handout offers a basic understanding of Cognitive Load Theory and defines some essential vocabulary: *shallow work, deep work, deliberate practice*.
        - **ii.** Importantly, the researcher will facilitate discussion about how teachers already employ strategies that reflect the concepts on Handout 2. For example, the following questions will be offered for reflection:
            1. How do you avoid overwhelming novices with new information?
            2. How do you reduce extraneous cognitive load?
            3. How do you simplify new information?

4. How do you alternate between shallow work and deep work within a typical 90-minute class period?
5. How do you schedule purposeful, deliberate practice during class periods?

4. **Facilitation of Questions & Discussion**
   a. With the aid of the two teacher handouts and the benefit on prior reflection, the researcher will now officially ask the following questions to the focus group:
      i. **Questions regarding path-goal priorities:**
         1. How do you define goals?
         2. How do you clarify paths to success?
         3. What are some common student obstacles, and how do teachers remove those obstacles?
         4. How do teachers provide support along the path to success?
      ii. **Questions regarding deep work:**
         1. What practices, situations, or mistakes result in shallow work by students?
         2. How do you facilitate deep work and deliberate practice?
         3. How do you avoid overwhelming novices with new information?
         4. How do you reduce extraneous cognitive load?
         5. How do you alternate between shallow work and deep work within a typical 90-minute class period?

5. **Researcher Role:** As the researcher, I will facilitate discussion by alternating who begins each answer. I will encourage a free exchange of ideas among teachers. Besides recording the audio of the meeting, I will also take notes.

6. **Conclusion & Follow Up**
   a. The researcher will conclude the focus group with an offer to hear any final thoughts about the subject matter. I will thank the group again for their participation.
   b. The researcher will remind the teacher participants of <u>three upcoming emails</u>:
      i. **Immediate follow-up email**
         1. The researcher will reflect, listen to the transcript, and review notes in order to type up a summary of the focus group discussion. The researcher will then send the following to the teacher participants within a week of the focus group:
            a. A thank you for participation
            b. A summary of the discussion
            c. Attachments of the two handouts provided at the focus group

ii. **Later, an email regarding small-group interview**
    1. Teacher participants can anticipate an email invitation to schedule a small-group interview two to three weeks later.
iii. **Later, an email regarding collection of artifacts**
    1. Teacher participants can anticipate an email reminder to share, either via email or hard copy left in the researcher's mailbox, a teaching artifact that exemplifies a concept discussed in the focus group.

c. The researcher will dismiss with one final thank you to the group.

Appendix H: Teacher/ Assistant Principal Participant Interview Questions

Researcher opening script:

Thank you so much for meeting with me. I appreciate your time, and I value your contribution.

As we work our way through these questions, you are encouraged to address each other and add comments to answers offered. If a fellow teacher reminds you of something relevant, feel free to add to your answer. My role today is to ask the questions and help us stay on track in terms of time. I will do my best to conclude this interview within one hour.

At this point, I am going to begin the audio recording of our interview. Do you each consent to the recording? [Wait.] *Also, as a reminder, your names will remain anonymous in my dissertation, but for now, in order to remain organized could you each state your first name, the subject you teach, and the number of years you have been teaching?* [Wait.] *Thank you.*

Let's begin.

Warm-up item: Is there a recurring question, idea, or statement, like a mantra, that you continually keep in mind as a teacher? [Provide further clarification if needed.]

Defining Goals

1. How do you/teachers communicate requirements of assignments for your students?
2. How do you/teachers communicate learning goals to your students?
3. How do you/teachers communicate the purpose of your assignments and learning goals?

Clarifying the Path to Learning

4. When you/teachers recognize a student is failing to understand a concept, how do you/teachers facilitate a new path to learning? In other words, how do you/teachers adjust to accommodate a student who is not showing progress?
5. Explain two ways students can show you/teachers that they have learned material or gained a skill.

6. In what ways do you/teachers make essential tools and information available to students? In other words, what resources are readily available for students to use and not have to necessarily memorize?

Removing Obstacles

7. How do you/teachers assist a student who is entirely disengaged because of being far behind because of lack of knowledge and/or missing work?
8. How do you/teachers acknowledge students' busy school, work, and sports schedules?
9. How do you/teachers encourage deep work for students? In other words, how do you/teachers facilitate focus during activities and work time?

Providing Support

10. How do you/teachers encourage students to seek help when they're uncertain of concepts or requirements?
11. How do you/teachers provide feedback to students?
12. How do you/teachers connect with your students personally?

Appendix I: Teacher Artifact Analysis Tool

Analysis of artifact by researcher Will call teacher for clarification if needed		**Notes about deep work component**
Description and apparent purpose of artifact		
Elements that align to defining learning goals		
Elements that align to clarifying a path to learning		
Elements that appear to remove obstacles		
Elements that provide support to student learning		

Appendix J: Student Interview Questions

Researcher opening script:

[For students who do not know me already.] *Hi, I'm Ms. Scott.*

Thank you so much for meeting with me. I appreciate your taking time out of Intervention to chat with me. My plan today is to ask you some questions about things teachers do that really help you stay organized, stay focused, and learn the material.

I am not "grading" your teachers. In fact, I am trying to gather teaching practices that really help students. There is no need for you to indicate who the teacher is in your answers, so to keep things simple, you can start your answers with When teachers…*, or* I like when teachers…

The point of this session is for me to get information from you, so I won't make a lot of comments during our conversation.

At this point, I am going to begin the audio recording of our interview. Do you consent to the recording? [Wait.] *Also, as a reminder, your name will remain anonymous in my paper, but for now, in order to remain organized could you state your first name and what grade you're in?* [Wait.] *Thank you.*

Let's begin.

Warm-up question: Please share three words that describe your best teachers.

Defining Goals

1. What is the best way for teachers to communicate requirements for assignments?
2. What are some things teachers do that really help you anticipate exactly what to expect in their class?

Clarifying the Path to Learning

3. Describe a time when a teacher allowed you to re-try an assignment or test in order to give you another chance to show them you have learned a concept. Also, please say to what extent the redo/revision assisted in your learning.
4. What are some ways a teacher has really helped you stay organized for their class?

Removing Obstacles

5. Can you share with me two or three obstacles you've faced when trying to complete work for a class?

6. How do the best teachers help you overcome all the distractions of school? In other words, what do the best teachers do to provide an environment that encourages productivity?

Providing Support

7. If you need help with a lesson or assignment, what is your preferred way to ask for help?

8. What are some ways a teacher can provide support to you? In other words, think of a teacher you think is especially supportive of you and describe him or her.

Appendix K: Endorsement Statement from Head Principal

20 October 2021

To Whom It Concerns:

This document serves to express support from the Glendale High School head principal for the intention of Keely Scott to use her research and findings from her dissertation to create and present professional development for teachers at Glendale High School.

Principal Josh Groves has approved prospective professional development sessions to be led by Keely Scott upon completion of her research and writing of her dissertation.

Signature of Josh Groves 

VITA

Keely has over twenty years of experience as an educator. Her first teaching job was as an English composition instructor at Missouri State University. Keely's high school teaching career began at Rolla High School where she taught various English courses for grades sophomore through senior. While teaching at Rolla, she became an Advanced Placement English Literature & Composition teacher as well as a national Reader for College Board. After several years at Rolla, Keely served as the Library Media Specialist at Waynesville High School for a year before continuing her teaching career at Waynesville High School where she taught both literature and composition. Since 2018, Keely has taught English at Glendale High School.

Keely's educational background includes a Bachelor of English with a minor in Education from Central Methodist University, and a Master of Arts in Literature from Missouri State University.