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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

EMPOWERING EDUCATORS: THE IMPACT OF A  
PROFESSIONAL LEARNING PROGRAM ON  
COLLECTIVE TEACHER EFFICACY

A Dissertation Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Education

Larisa Gray

College of Education and Behavioral Sciences  
School of Teacher Education  
Educational Studies

August 2024

This Dissertation by: Larisa Gray

Entitled: *Empowering Educators: The Impact of a Professional Learning Program on Collective Teacher Efficacy*

has been approved as meeting the requirements for the Degree of Doctor of Education in the College of Education and Behavioral Sciences in the School of Teacher Education, Educational Studies program

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## ABSTRACT

Gray, Larisa. *Empowering Educators: The Impact of a Professional Learning Program on Collective Teacher Efficacy*. Published Doctor of Education dissertation, University of Northern Colorado, 2024.

This study examined the effectiveness of the Exploring Scholars Initiative (ESI) at Alpine International School (AIS) in Europe in enhancing collective teacher efficacy. Established nine years ago, the ESI supports innovation and best practices in professional development. Alpine International School faculty are invited to propose passion projects to grow professionally and develop innovative teaching methods through educational research at Alpine. The ESI at AIS provides staff a unique opportunity to delve deeply into educational issues within their school context by enhancing professional development and enriching the academic environment for all staff and students. The purpose of this study was to interpret and evaluate how a specific model of professional learning (PL) cultivated collective teacher efficacy (CTE) through the identified enabling factors. Twenty Alpine teachers were surveyed and 17 Alpine administrators and teachers were interviewed to answer the following research questions:

- Q1 How do AIS teachers' experiences with the Exploring Scholars Initiative relate to their measure of collective teacher efficacy?
- Q2 How does the Exploring Scholars Initiative support the five factors of fostering collective teacher efficacy: empowered teachers, embedded reflective practices, cohesive teacher knowledge, goal consensus, and supportive leadership?

This study found a correlation between participation in the ESI and higher collective teacher efficacy, particularly in goal consensus, cohesive teacher knowledge, and embedded reflective practices. Implications suggested that while professional learning initiatives enhanced

collective efficacy by aligning individual goals with the school's mission and fostering collaboration, structural design and collaborative practices must be optimized to maximize the program's impact across the institution.

## ACKNOWLEDGEMENTS

I have been given the opportunity to make my dream a reality and it would not have been possible without my husband. This learning journey was not mine alone, and together we learned so much about who we are and how we want to raise our kids together. Thank you for your constant support and willingness to not only push me, but to push yourself until the very end. I also want to thank Dr. Harding for her patience and constant support as my perfectionism ruled my learning journey. Dr. Gottlieb for being as excited as I was for my personal growth, and Dr. Erekson and Dr. Cooney for their support along the way. I also want to thank my parents for giving me the tools I need to continually find my niche in this world. Your belief in me cultivated my confidence to reach out and grab on to my dreams.

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## CHAPTER I

### INTRODUCTION

The purpose of this study was to interpret and evaluate how a specific model of professional learning (PL) cultivated collective teacher efficacy (CTE) through the identified enabling factors. A theoretical relationship between PL and CTE had been established (Loughland & Nguyen, 2020; Loughland & Ryan, 2020). A practical model demonstrating the link between PL and CTE had yet to be directly identified prior to this study.

#### **General Statement**

I was buzzing, animatedly talking with my hands as I passionately pitched my idea to the school leader. Their verdict? It is too advanced for our most challenging teachers. Shortly before this interaction, I had a revelation: Imagine if we set up self-identified professional learning groups where teachers could shape their learning paths together. Whether through book studies, professional development, college classes, or self-guided inquiry cycles, these groups could explore different methods focused on increasing their impact on student learning. At the end of the year, each group would share what they learned along their learning journey. Despite my excitement, the look on my assistant principal's face cemented the fact my idea had been rejected.

Fast forward three years, and my original idea got a second chance. Now, as an assistant principal myself, I was tasked with creating impactful in-house professional learning experiences. I sought advice from seasoned professionals. An enthusiastic expert shared valuable insights and told me about a European school trying innovative methods to help teachers grow

for better student learning. One of these methods was the Exploring Scholars Initiative, a framework enabling teachers to navigate their year-long learning journey based on their interests and needs—mirroring my own rejected idea.

Could it be? A school-wide system empowering teachers as learning professionals? School leadership placing trust in teachers to elevate student outcomes? A structured platform for all teachers to reflect and exchange knowledge? All I could think about was how desperately I wanted to witness the Exploring Scholars Initiative in action. The possibility of such a transformative approach left me eager and yearning for a paradigm shift in my school's educational landscape.

In the broader landscape of educational research, exploring innovative teaching methodologies and their impact on student learning has been a subject of considerable interest. Researchers dedicatedly delved into identifying factors that contributed significantly to effective teaching and improved educational outcomes. One notable contribution to this endeavor was CTE, or a “collective self-perception that teachers in a school can make an educational difference to their pupils over and above the educational impact of their homes and communities” (Tschannen-Moran & Barr, 2004, p. 3).

This corroborated with other research conducted over the past two decades. Researchers consistently demonstrated that CTE significantly predicted student achievement (Bandura, 1993; Goddard, 2001; Goddard et al., 2000, 2004, 2015; Hoy et al., 2002, 2006; Moolenaar, 2012; Tschannen-Moran & Barr, 2004), with strong CTE measures improving individual teacher performance and shaping shared organizational beliefs (Goddard & Goddard, 2001; Goddard et al., 2000, 2004; Hoy et al., 2002; Klassen et al., 2008), impacting school culture and fostering inclusive practices for diverse student populations (Gibbs & Powell, 2012; Tschannen-Moran,

2001), ultimately promoting high scholastic expectations and encouraging behaviors conducive to intellectual development (Bandura, 1997; Goddard et al., 2004, 2015; Hoy et al., 2002; Tschannen-Moran & Barr, 2004).

According to Bandura (1977, 1998), the formation of collective efficacy relies on the cognitive processing of information obtained from four distinct sources of past experiences. These sources play a crucial role in shaping how teams build their collective efficacy: mastery experiences, vicarious experiences, verbal persuasion, and affective states (Bandura, 1977; Donohoo, 2018; Goddard & Goddard, 2001). Teachers cognitively construct collective efficacy best when they experience a series of repeated successes, observe others succeeding, are guided through suggestion into believing they have the capability to effectively manage challenges that may have overwhelmed them in the past, and anticipate success (Bandura, 1977). Donohoo (2018), Donohoo et al. (2020), and Anderson et al. (2023) connected these sources of collective efficacy to variables within the school environment and leadership that were malleable structures, identifying school characteristics that contributed to the support and cultivation of CTE. These malleable factors included empowered teachers, embedded reflective practices, cohesive teacher knowledge, goal consensus, and supportive leadership (Donohoo, 2018). Empowered teachers are educators who exhibit a heightened sense of agency, autonomy, and influence in their professional roles (Smylie, 1988). Supportive leadership references the perception that school leaders protect staff from extraneous tasks and distractions and recognize staff accomplishments (Donohoo et al., 2020). Embedded reflective practices in education refer to the systematic processes by which teams of educators collaboratively examine various sources of student evidence and feedback to inform and enhance their instructional practices (Donohoo et al., 2020). Cohesive teacher knowledge refers to the collective awareness and consensus among

staff members regarding what constitutes effective teaching practices (Donohoo et al., 2020). Goal consensus represents a unified understanding and agreement among educators within a school or educational institution regarding objectives and aspirations for student learning, professional development, and school improvement (Donohoo et al., 2020). The research illuminated these factors as crucial components in fostering an environment where CTE could thrive, ultimately leading to improved student outcomes and a more effective educational system.

In school structures overseen by leadership, in-house professional development plays a pivotal role, demonstrating a significant positive correlation with student outcomes (Darling-Hammond et al., 2017). Effective professional development (PD) is structured PL that instigates substantive changes in teacher practices, leading to discernible improvements in student learning outcomes. According to Darling-Hammond et al. (2017), Desimone (2009), and Learning Forward (Foster, 2022), seven essential features of PD maximized its impact: a focus on content, integration of active learning methodologies, facilitation of collaboration, utilization of models showcasing effective practices, provision of coaching and expert support, incorporation of feedback and reflective practices, and sustained duration of engagement. These elements collectively characterized effective PD, ensuring a comprehensive approach that positively influenced educator practices and student learning outcomes.

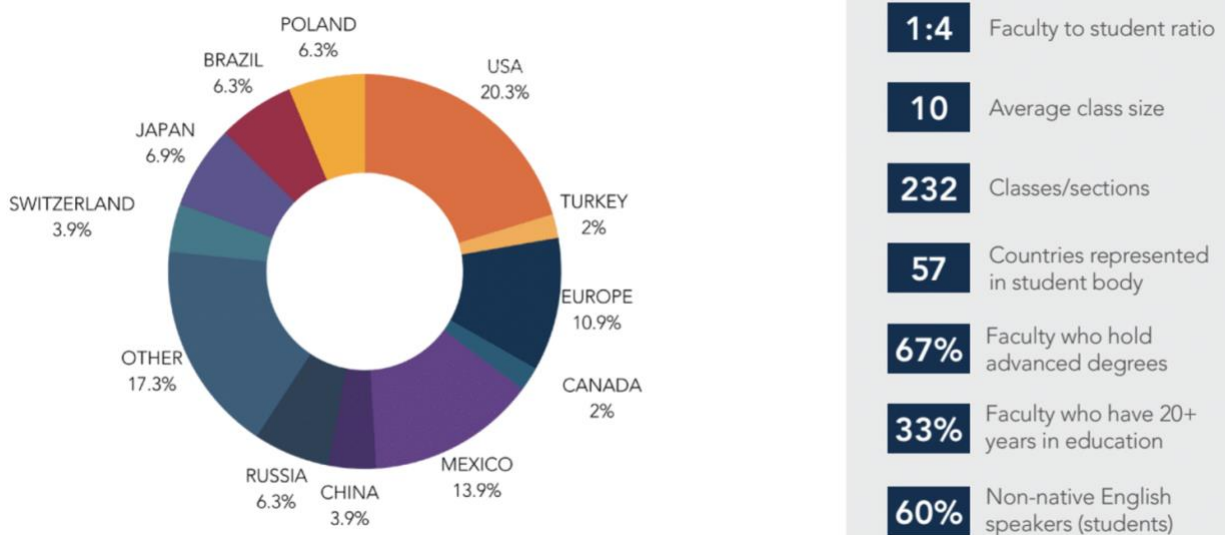
In 2018, Donohoo's review of research studying the intersection of CTE and PL found a gap in our understanding of how effective PL structures could be harnessed to nurture and enhance CTE. Since then, a few studies have explored the direct link between PL and CTE but focused on the sources of CTE instead of the malleable factors identified by Donohoo. Loughland and Ryan (2020) revealed that the four motivational constructs of teacher collective efficacy work together in effective teacher PL. de Carvalho et al.'s (2023) findings implied PL



could influence efficacy perceptions by employing a well-structured combination of activities to stimulate motivational constructs enhanced by specific temporal and organizational structures that facilitate learning and practice transformation. Loughland and Nguyen (2020) revealed a convergence between CTE and existing literature on effective teacher PL, providing clear evidence for two sources of teacher collective efficacy related to mastery and vicarious experiences. Donohoo called for research to continue bridging the gap between theory and practice, especially around PL, fostering opportunities for collaboration between researchers and practitioners. Donohoo highlighted one promising avenue for achieving this bridge: inquiry-based approaches to PL, such as collaborative action research or collaborative inquiry, which also involves thorough documentation and sharing of findings, facilitating the alignment of research with classroom practice. The ESI at AIS is a PL program that appeared to fit this need. This study explored the ESI as a practical approach to fostering CTE.

### **Alpine International School in Europe**

The Alpine International School (AIS or Alpine), a private boarding school nestled in the picturesque Alps, is renowned for providing a high-quality American-style education to an international student community. For the 2023/2024 school year, AIS has 307 students from 60 countries in grades 7-12 and a postgraduate year with a senior class of 74 students. With such a diverse student body, Alpine's mission is dedicated to developing innovative, compassionate, and responsible global citizens. Central to this mission are core values that emphasize the pivotal role of teachers in shaping students' holistic growth, the importance of inspired leadership, and a commitment to continuous improvement. To support the diverse student experience, the faculty-to-student ratio and average class size are low; see Figure 1. The faculty is also well-educated and experienced.

**Figure 1***Alpine International School Student Population*

*Note.* Data compiled by researcher from AIS (2023).

Alpine International School's journey began in 1960, founded by a visionary married couple determined to offer a comprehensive education to students from diverse cultural backgrounds. Over the years, AIS evolved from a modest boarding school into an institution recognized for its commitment to academic excellence and outdoor education. As AIS continued to grow and thrive, it garnered international acclaim in the 21st century for its innovative educational programs and dedication to sustainability. This recognition positioned AIS as a leader in international education, with a unique emphasis on environmental stewardship and global citizenship, values that are deeply ingrained in the school's culture and have a profound impact on student learning.

In the administration's commitment to providing a rigorous curriculum and teacher support for student success, AIS embarked on a journey of in-house PL programs. The school

embraced the slogan "Continually becoming the professionals we already are," reflecting the belief that faculty members are valuable resources for expertise and school improvement. In 2013, the Educational Research at Alpine (ERA) was formally established, providing a dedicated space for educator PL initiatives.

One of the notable programs within ERA was the Exploring Scholars Initiative (ES), which allowed faculty members to propose and execute year-long passion projects of their choice. These projects turn practitioners into researchers, promoting ongoing PL, collaborative inquiry, and vicarious experiences as projects are completed with peers and findings are shared, enriching the academic environment at AIS.

The ES has evolved over the years with educators actively seeking to participate in this learning opportunity. All educators, including librarians, administrators, and resident life staff are invited to join ES provided they were willing to collaborate, share their insights with the school community, and contribute to ERA's ongoing PL efforts. Donohoo (2013) pointed out this collaborative and research-based approach was not new to PL and was effective in sustaining meaningful change in educator practice. The popularity of ESI with Alpine staff indicated the success of this learning program, enhancing participants' teaching practices and contributing to the school's academic excellence. Thus, studying the ES as a PL program was essential to interpreting and evaluating how an established school structure impacted CTE.

### **Statement of Problem**

There is a solid theoretical connection between effective teacher PL and the validated construct of teacher collective efficacy. However, this theoretical association needs practical implementation to establish a theory of action. Moving beyond measuring collective efficacy and into a malleable concept for PL is crucial (Loughland & Nguyen, 2020). Additionally, collective

efficacy and effective PL share common principles by emphasizing collaborative teacher involvement in their learning. They both lead to improved student outcomes, and they have a strong confluence. However, more research is needed to understand the practical aspects of this collaboration within PL (Durksen et al., 2017). Core features of effective teacher PL include collaboration, focus on current practice, integration of theory and practice, an explicit theory of action, and continuous evaluation measures. These principles provide a framework for designing and evaluating PL programs (Desimone, 2009). To help bridge the gap between theoretical and practical impacts on CTE, this study was guided by the following research questions:

- Q1 How do AIS teachers' experiences with the Exploring Scholars Initiative relate to their measure of collective teacher efficacy?
- Q2 How does the Exploring Scholars Initiative support the five factors of fostering collective teacher efficacy: empowered teachers, embedded reflective practices, cohesive teacher knowledge, goal consensus, and supportive leadership?

### **Overview of Research Design**

This study adopted Elliot Eisner's (2002) qualitative research approach—educational connoisseurship and criticism—to gain a holistic understanding of the impact of the ESI on educators at AIS. Connoisseurship, as clarified by Uhrmacher et al. (2016), involves the use of one's sensory faculties to discern current experiences and make fine-grained distinctions, with a focus on understanding the intricate details and subtleties influencing these experiences (Eisner, 2002). To effectively employ connoisseurship, researchers require access, presence, keen observation skills, and a background understanding of the subject matter, necessitating a deep understanding of AIS's educational ethos regarding ESI and CTE.

As Eisner (2017) identified, an educational institute like AIS features a complex educational environment with five dimensions of school ecology: intentional, structural, curricular, pedagogical, and evaluative. These dimensions function as interconnected living

systems, collectively shaping the school's culture (Eisner, 2002, 2017; Uhrmacher et al., 2016). This study focused on the intentions of Eisner's ecology of schooling by employing the 'instructional arc' as defined by Uhrmacher et al. (2016). The instructional arc investigates three aspects of the curriculum: the intentional curriculum, the operational curriculum, and the received curriculum. Appreciating the ESI curriculum through this lens aims to reveal the nuances within these elements, thus setting the stage for subsequent critical analysis. These three questions call for exploring how all Exploring Scholars interpret and engage with the ESI's curriculum and its connection to AIS's broader professional development offered to impact student outcomes. Chapter III delves deeper into the study's precise design, offering specific methodology and structure.

### **Definitions of Terms**

The following definitions might help readers understand the context of each term used in this study.

**Cohesive Teacher Knowledge.** Knowledge with a shared understanding and agreement among staff members about the characteristics of effective teaching practices (Donohoo et al., 2020).

**Collective Teacher Efficacy (CTE).** Collective self-perception that teachers in a school can collectively make an educational difference to their students that goes beyond the educational influence of their students' homes and communities (Tschannen-Moran & Barr, 2004, p. 3).

**Embedded Reflective Practices.** Systematic processes through which teams of educators collaboratively analyze diverse sources of student evidence and feedback to inform and improve their instructional practices (Donohoo et al., 2020).

**Empowered Teachers.** Educators who demonstrate an elevated sense of agency, autonomy, and influence in their professional roles (Smylie, 1988).

**Exploring Scholars Initiative (ESI).** An in-house PL initiative that involves soliciting proposals in curriculum, instruction, assessment, and other areas, with successful applicants receiving support throughout the academic year to develop and share their projects both internally and within the international school community. The program's overarching goal is to support creative and motivated staff in exploring educational issues within the school context, enhancing their professional development experiences while enriching the academic environment for the entire school community.

**Goal Consensus.** Shared understandings and agreements among educators within a school or educational institution regarding the objectives and aspirations for student learning, professional development, and school improvement (Donohoo et al., 2020).

**Professional Learning (PL).** An ongoing process by which educators engage in structured activities and experiences to enhance their knowledge, skills, and effectiveness in their professional roles (Donohoo et al., 2020).

**Supportive Leadership.** Supportive leadership entails the perception that school leaders shield staff from unnecessary tasks and distractions while acknowledging and celebrating staff accomplishments (Donohoo et al., 2020).

### **Assumptions, Delimitations, and Limitations**

The underlying assumption of this study posited that the ESI was developed without a specific focus on the enabling factors of CTE. It is important to note that Donohoo et al. (2020) identified these enabling factors of CTE several years after the inception of ESI in 2014.

Consequently, ESI has functioned as a school characteristic that might have contributed to shaping CTE at AIS without a deliberate intention to do so.

One unique aspect of this study was the international school setting, which presented challenges and opportunities. The study participants were educators at a private international school, who worked together and resided in a closely-knit expatriate community, leading to constant interactions outside of regular work hours. This unique communal environment might have influenced educators' perceptions of their peers and leaders in ways that extended beyond the typical dynamics found in American public schools. A study critiquing a public school might observe fewer interactions among staff members, potentially imposing additional organizational barriers. Furthermore, this distinctive living arrangement could have also impacted the measurement of collective teacher efficacy, as the school governed the students' academic experience and served as their home-life and community during the school year. In contrast, a study scrutinizing a public school does not have control over the students' home-life and community during the school year.

Another limitation pertained to how educators assessed student achievement at AIS. Given that CTE reflected teachers' perceptions of their collective capacity to facilitate their students' academic growth, it was essential to acknowledge that the methods employed by educators to measure student achievement might differ from those used in American public schools.

The location of the school also created a time constraint around data collection. Onsite presence was limited to two weeks due to ERA's structures for Global Scholars. Thus, many interactions and formal systems provided in the learning journey for Exploring Scholars were not

available for direct observation. Interviews captured these experiences through the eyes of the participants only.

After having accumulated eight years of professional experience at an American public school that additionally provided the International Baccalaureate (IB) Diploma Program, Advanced Placement (AP) classes, and conferred American high school diplomas, this researcher acknowledged the potential presence of conscious and unconscious biases stemming from these extensive workplace engagements. These experiences encompassed a broad spectrum of educational roles including curriculum development and instruction, leadership in professional development initiatives, formulation of a structured framework for PL, and serving as an instructional leader.

### **Summary**

The outcome of this study lay the foundation for a practical framework for teacher PL, specifically focused on bolstering CTE, which could positively influence education. The study findings are of interest to a range of stakeholders including PL leaders, administrators, teacher leaders, and academic coaches.

Subsequent chapters provide a structured framework for this research. Chapter II offers an extensive literature review covering the Exploring Scholars Initiative, Professional Learning, and Collective Teacher Efficacy. Chapter III presents the research design and methodology, offering specific insights into the study's execution.



## CHAPTER II

### LITERATURE REVIEW

#### **Introduction**

Alpine International School (AIS) stands out as a private boarding school, nestled in the scenic Alps, and is renowned for its American-style education. With a student body hailing from 60 different countries, AIS is a beacon of inclusivity, teacher leadership, and continuous improvement. The school's Exploring Scholars Initiative (ESI) is a testament to its commitment to innovative professional development and collaboration among educators. This program empowers teachers to undertake classroom-based projects, marking a shift towards internal professional growth. Alpine staff actively engage in research-based learning, fostering autonomy and enhancing professional development. This underscores AIS's mission to cultivate forward-thinking global citizens, starting with its educators.

In the realm of education, AIS symbolizes the perpetual quest for excellence. As defined by Darling-Hammond et al. (2017), effective professional development is a continuous growth journey. Seven key elements elevate professional development to benefit teachers and students including content focus, active learning, collaboration, modeling, coaching, feedback, and sustained duration. Each element is vital in enhancing educators' knowledge and practice, fostering a culture of improvement (Darling-Hammond et al., 2017).

Collective teacher efficacy (CTE) represents educators' shared belief in their ability to positively impact students' learning (Donohoo et al., 2020). This belief is influenced by various factors, including mastery experiences, observing peers (vicarious experiences), fostering a

shared purpose (social persuasion), and teachers' emotional states (Bandura, 1986, 1997). Recent research also highlights the role of school factors like supportive leadership, embedded reflective practices, cohesive teacher knowledge, and goal consensus in strengthening collective teacher efficacy (Anderson et al., 2023; Donohoo et al., 2020). Moreover, there is a connection between professional learning and collective teacher efficacy, where effective professional development provides opportunities for teachers to cognitively develop CTE (de Carvalho et al., 2023; Loughland & Nguyen, 2020; Loughland & Ryan, 2020), but a lack of research on how the structure of effective PL enhances CTE through malleable school factors (Anderson et al., 2023; Donohoo et al., 2020).

Alpine International School's ESI serves as a compelling case study, demonstrating how empowering faculty through professional learning could influence collective teacher efficacy. This research was specifically designed to delve into the relationship between ESI and CTE with a primary focus on the interplay between professional learning, teacher efficacy, and the advancement of educational practice at AIS.

### **Alpine International School in Europe**

Alpine International School is an international educational institution situated in the European Alps. Founded in 1960, AIS has a storied history. It has grown into a globally recognized institution known for its dedication to delivering a high-quality American-style education within an iconic scenic backdrop of mountains and alpine forests. A defining strength of AIS is its diverse and inclusive international community. Students from over 60 countries converge to foster a rich cultural exchange and a global perspective within the student body. Complementing this diverse learning environment, Alpine's mission is educator dedication to develop innovative, compassionate, and responsible citizens of the world. To best orchestrate

this mission, AIS identified several values followed by all Alpine staff to “educate the next generation of passionate thinkers and leaders” including:

- Teachers are Key | Our faculty plays a key role in creating a far-reaching education for our students that extends beyond the classroom to include social, moral, and emotional growth (Name withheld for confidentiality, 2023).
- Leadership Through Inspiration | As educators, we know that inspired students are motivated students. For that reason, faculty and administrators work to provide inspired leadership to every student at [AIS] (Name withheld for confidentiality, 2023).
- Continuous Improvement | To promote an evolving environment of academic excellence and personal growth, [AIS] seeks to make the newest technologies and most innovative tools available for our students (Name withheld for confidentiality, 2023).

These values came from a rich history of heads of schools evolving the learning environment to meet the needs of Alpine students.

## **Brief History of Alpine International School**

### ***Founding and Early Years (1960s-1970s)***

Alpine International School was established in 1960 by a married couple of visionaries aiming to create an international school providing a comprehensive education to students from diverse cultural backgrounds. The institution originated as a modest boarding school and, over time, expanded its facilities and academic offerings.

### ***Development and Growth (1980s-1990s)***

The 1980s and 1990s witnessed AIS's continuous expansion and development. The international school broadened the offered curriculum with the International Baccalaureate

Diploma Program and grew the student body by attracting students from various nations, including the United States. Its dedication to academic excellence and its unique emphasis on outdoor education in the stunning Alps setting became hallmarks of the school.

### ***International Recognition (2000s-2010s)***

In the 21st century, AIS garnered international acclaim for its innovative educational programs and strong commitment to sustainability. The school's emphasis on environmental stewardship and global citizenship struck a chord with students and parents, positioning AIS as a leader in international education.

### ***Now (2020s)***

Present-day AIS annually hosts approximately 300 students from 60 different countries with a significant portion of its graduates achieving remarkable academic success. Specifically, about 50% of graduating students obtained an International Baccalaureate Diploma by securing at least 24 points as the combined score for each subject exam (AIS, 2019, 2020, 2021, 2022, 2023). Moreover, these graduates exhibited exceptional performance with an average score of 34 points and an impressive passing rate of 94% as detailed in Table 1.

This high level of achievement among AIS students facilitated their seamless transition into higher education institutions worldwide. Between 2021 and 2023, AIS graduates were admitted to 145 prestigious schools across Canada, Europe, the United States of America, the United Kingdom, and other regions. These statistics underlined the school's commitment to academic excellence and its global impact on students' educational trajectories.

**Table 1***Academic Profile of Alpine International School*

Year	Enrolled Students	Graduates	International Baccalaureate Diploma's Earned	Average International Baccalaureate Points	International Baccalaureate Passing Rate at Alpine International School (%)	International Baccalaureate Passing Rate in the World (%)
2020	300	62	35	34	92	85
2021	275	86	48	34	98	89
2022	301	91	38	36	100	86
2023	300	93	39	33	87	79
2024	307	74				
Average	297	81	40	34	94	85

*Note.* Data compiled by researcher from AIS, 2019, 2020, 2021, 2022, 2023.

**Educational Research at Alpine International School**

In 2009, the AIS administration implemented a strategic shift in its approach to professional development. The traditional practice of engaging external experts for one-time professional development sessions was replaced with a novel strategy; AIS began to invest in its faculty members, recognizing the value of their expertise and their potential to foster continuous professional growth. This transformative initiative aimed to cultivate a culture of ongoing collaboration and classroom-based experiences among the teaching staff. The underlying philosophy of this shift communicated a powerful message to AIS staff. It underscored their status as seasoned professionals with the collective knowledge and expertise necessary for school improvement.

Furthermore, the transition emphasized that AIS staff not only deserved financial compensation for their educational contributions but were also capable of learning from and

educating their peers. In essence, AIS conveyed the belief that its teachers were the primary reservoir of expertise, serving as the driving force behind school improvement. This institutional transformation encapsulated a paradigm shift in the perception of professional development, highlighting the significance of internal collaboration and faculty-driven learning experiences.

In 2013, the Educational Research at Alpine (ERA) was formally established to support this shift in PL. Educational Research at Alpine's appointed Director of Research was provided autonomy and a generous operating budget to continue programs focused on educator PL. These resources provided a space to host the ESI:

Each year, ERA solicits proposals in curriculum, instruction, assessment, and other areas. The eight faculty members with successful proposals are supported through the academic year by each other and ERA. Projects are presented internally and, when appropriate, shared with the wider international school community through blogs, articles, and presentations. Since its inception in 2014, over 60 projects by 47 individual teachers (some teachers have completed two or more projects) have contributed to the professionalism of the faculty at AIS.

Faculty members were recruited to participate in this learning opportunity when ESI started. Now, the eight available positions are highly sought after and personal projects have reached a higher and higher caliber.

All AIS educators including librarians, administrators, and resident-life staff might attempt to join ESI if they are willing to collaborate, host an ERA Learning Session available to anyone in the school community, and write up their work to publish on ERA's website. If accepted, AIS staff members execute their project, creating a meaningful and collaborative PL experience directly tied to their classroom and artistry as educators. This system provides

research-based ongoing PL in a classroom context with complete autonomy, giving the teacher ample opportunity for input and decision-making power. More specifically, the goal of ESI is “to provide support for creative and driven staff to explore educational issues in depth in our school context to enliven their experiences of professional development at [AIS] while enriching the academic environment for us all.”

For the 2023/2024 school year, all ESI positions were claimed with the following projects:

- Use of Comics in French Language Acquisition
- Embedding Executive Functioning Skills within the Classroom
- Teaching through Simulations
- Using the School Mission Statement to Create a Schoolwide Reading Project
- Fostering Creativity and Critical Thinking in the Innovation Lab
- Learning through Literary Lenses
- Math Videos for Flipped Classrooms and to Serve Tutoring Gaps

Educators underwent a rigorous application process to become one of these Exploring Scholars. Each applicant submitted a project proposal detailing their ideas and plans for professional development. A committee of AIS administrators and teachers then reviewed those applications, selecting projects demonstrating promise and innovation. Those chosen received a stipend and structured support from ERA leaders, ensuring their projects were guided and nurtured to fruition.

### **Professional Learning**

The evolution of PL at AIS was one example of the ever-evolving education landscape. Pursuing excellence is an enduring goal, demanding continuous growth and development among

educators. Acknowledging this need, scholars and practitioners extensively explored the various facets of professional development that contributed to improved teaching and enhanced student outcomes. According to Darling-Hammond et al. (2017), effective professional development is “structured professional learning that results in changes to teacher knowledge and practices and improvements in student learning outcomes” (p. 2). Effective PL could be likened to climbing a mountain, an activity AIS students engaged in to explore the world around their school. Just as climbers embarked on a journey to reach the summit, educators engaged in a continuous journey of learning and growth. The base camp represented climbers’ foundational knowledge and skills; as they ascended, climbers encountered various challenges and obstacles, much like educators faced new students, teaching methods, content, and policy. Each step of the climb was an opportunity to gain new insights, just as each learning experience enhanced an educator's understanding. Reaching the summit symbolized mastery in their field but the journey did not end there; like PL, climbing is a cycle of continuous growth with new peaks to conquer and more breathtaking vistas of knowledge to explore. Along each hike, peers, tools, mindsets, and much more help the climber navigate the most efficient route, enhancing the experience. The same is true for professional development. Seven identified elements elevate professional learning and increase the impact on teacher practice (Darling-Hammond et al., 2017): content-focused, incorporating active learning strategies, engaging teachers in collaboration, using models and modeling, providing coaching and expert support, including opportunities for feedback and reflection, and are of sustained duration.

### **Content-Focused**

Effective professional learning aligns with teachers' subject matter and classroom context, providing opportunities for interaction with students' work and pedagogical



improvement (Darling-Hammond et al., 2017; Desimone, 2011). Content-focused PL is akin to climbing a mountain with a specific destination. Much like climbers who prepare and equip themselves with the right tools and knowledge for a particular ascent, educators engage in content-focused professional development to deepen their understanding of the subject matter they teach. The alignment with high-quality instructional materials emphasizes the crucial role of curriculum and assessments in teacher development (Foster, 2022; Rivet Education, 2023; Wiener & Pimentel, 2017). This approach underscores the need for PL that models the same high standards and engaging pedagogical practices expected from students (Foster, 2022; Wiener & Pimentel, 2017). Content-focused PL enhances teachers' subject knowledge and instructional effectiveness, positively impacting teacher knowledge and practice (Desimone & Garet, 2015). It deepens educators' understanding of their subject matter, improving their ability to convey complex concepts to students and boosting teacher confidence, job satisfaction, and retention (Ingersoll & Strong, 2011).

### **Incorporates Active Learning**

Active learning, based on adult learning theory, is an instructional approach that engages adult learners in meaningful, hands-on experiences, allowing them to actively construct knowledge and apply it to real-world situations (Merriam & Bierema, 2013). Malcolm Knowles (1973), a prominent figure in adult education, emphasized several key principles of adult learning. These principles include the idea that adults are self-directed learners; they bring their life experiences into the learning process and are motivated to learn when they see its immediate relevance. Active learning is comparable to climbers physically engaging with the mountain's terrain, tackling challenges, and navigating their way up the path. Educators must actively participate and engage directly with their learning content and teaching methods. Active learning

strategies align with these principles by providing “opportunities for teachers to observe, receive feedback, analyze student work, or make presentations” (Pak et al., 2020).

### **Supports Collaboration**

Challenges are constant in mountain climbing, forcing climbers to rely on collaboration to problem-solve in the face of unpredictable terrain and weather. At the same time, educators must collaborate to address teaching challenges like adapting to technology and closing learning gaps. Additionally, just as mountain climbers share essential resources, educators in professional development share valuable teaching materials and lesson plans, ensuring their practical use for the benefit of all involved. Thus, collaboration is integral in effective PL, fostering a cooperative environment where educators collectively address real-world challenges and enhance instructional practices (Ingersoll & Strong, 2011). This approach nurtures knowledge sharing, idea exchange, and collective problem-solving, amplifying the impact of PL within a supportive community where educators learn from each other's experiences and expertise (Desimone, 2011). Job-embedded professional learning, occurring within educators' daily work, ensures immediate relevance and applicability, recognizing that educators learn best when they can directly apply new knowledge and skills to practice (Birman et al., 2000).

Interactive and collaborative PL requires active engagement from educators in their learning experiences, fostering collaboration with peers who share similar roles (Foster, 2022; Rivet Education, 2023; Wiener & Pimentel, 2017). This collaborative effort focuses on individual and team-level improvement and school- and system-wide initiatives, ensuring equitable access to excellent teaching and learning. Research by Desimone and Garet (2015) supported the impact of collaborative professional development programs in job-embedded contexts, demonstrating positive outcomes in teacher knowledge and practice. Teachers engaged

in collaborative learning were notably more effective in applying their newfound knowledge within their classrooms. Ultimately, interactive and collaborative PL nurtures a culture of continuous improvement, collaboration, and shared accountability, benefiting all students and enhancing the overall educational experience (Desimone & Garet, 2015).

### **Uses Models and Modeling of Effective Practice**

Models and modeling in PL provide educators with exemplars and demonstrations of effective teaching and leadership strategies, guiding them to understand, emulate, and adapt successful practices (Grossman et al., 2009; Hattie, 2009; Joyce & Showers, 2002). Similarly, experienced climbers often serve as models when climbing a mountain, demonstrating proper techniques and safety measures. This modeling helps both educators and climbers internalize and adapt successful practices. Just as educators benefit from observing and analyzing effective teaching practices, climbers learn by observing and emulating experienced mountaineers' skills and strategies. These approaches involve showcasing how specific strategies or approaches are executed, allowing educators to observe, analyze, and internalize the practice (Joyce & Showers, 2002). In professional learning, models, and modeling encompass various forms including demonstration lessons conducted by experienced educators or instructional coaches (Darling-Hammond et al., 2017), video-based modeling using recorded classroom sessions (Timperley & Alton-Lee, 2008), case-based learning presenting real-world teaching scenarios (Papay et al., 2020), and peer observations for learning from peers' classroom practices (Timperley & Alton-Lee, 2008).

### **Provides Coaching and Expert Support**

Coaching and expert support in professional learning could be likened to having an experienced mountain guide when climbing a challenging peak. In both scenarios, educators and

climbers receive valuable guidance and assistance from those with more expertise. Just as climbers rely on guides to navigate challenging routes and make informed decisions, educators benefit from coaches and experts who provide personalized support and advice in their professional development journey. Coaching and expert support in PL entails the provision of individualized guidance and mentorship to educators, offering them personalized feedback and support to enhance their instructional practices (Ingersoll & Strong, 2011). Coaching in PL involves a structured and collaborative process where an experienced individual (the coach) provides guidance, feedback, and support to an educator seeking to enhance their practice (Ingersoll & Strong, 2011). Expert support refers to access to knowledgeable individuals who can provide educators with insights, resources, and mentorship, facilitating their professional growth (Darling-Hammond & Richardson, 2009). A study by Kraft et al. (2018) examined the impact of coaching on teacher performance and found coaching positively affected classroom practice, particularly when it was ongoing and focused on specific instructional practices.

### **Offers Opportunities for Feedback and Reflection**

Just as mountaineers review their climbing techniques and experiences after descending a mountain, educators need opportunities for feedback and reflection. In both contexts, reflection and feedback are crucial for improvement. Just as climbers assess their performance and decision-making to enhance their skills and safety on future climbs, educators reflect and receive feedback to evaluate their teaching practices and enhance their effectiveness in the classroom. Opportunities for feedback and reflection in PL encompass structured processes that encourage educators to analyze their teaching practices critically, engage in self-assessment, and consider improving their instructional methods and outcomes (Hattie & Timperley, 2007). Feedback provides educators with information about their performance, highlighting strengths and areas

for improvement (Wisniewski et al., 2020). Reflection involves educators critically examining their experiences, actions, and outcomes to gain insights and make informed decisions about their practice (Schön, 1983). Wisniewski et al.'s (2020) meta-analysis found that feedback positively impacted learning. The study concluded that feedback was most effective when more information was provided and significantly impacted cognitive and physical outcomes compared to motivational and behavioral criteria.

### **Sustained Duration**

Sustained duration in professional learning is akin to the commitment and endurance required to climb a mountain. Climbers do not reach the summit in a single bound; it takes time and persistence. Similarly, PL is an ongoing journey that extends beyond a one-time event. Educators need sustained and continuous opportunities for learning and development to make lasting improvements in their practice. Sustained duration in effective PL refers to providing ongoing and continuous learning experiences, allowing educators to delve deeply into content, practice, and reflection over an extended period, essential for meaningful skill development and transformation (Hirsh, 2009). Sustained duration refers to extended periods of engagement in PL activities, often spanning months or even years (Desimone & Garet, 2015). A study by Desimone and Garet (2015) found that longer-term engagement in professional development programs impacted teacher knowledge and practice substantially more than shorter-term programs.

### **Collective Teacher Efficacy**

Collective teacher efficacy has gained increasing attention in education research and is a target for intentional practices in school. It refers to the “collective self-perception that teachers in a given school make an educational difference to their students over and above the educational impact of their homes and communities” (Tschannen-Moran & Barr, 2004, p. 190). According to

Tschannen-Moran and Hoy (2007), CTE is built upon the foundation of individual teacher efficacy, representing an individual teacher's confidence in their ability to make a difference in their students' learning. Teacher self-efficacy influences behaviors fostering student success, such as persistent support for struggling students and creating conducive classroom environments (Goddard & Goddard, 2001). Bandura (1986, 1997) identified four cognitive sources influencing self-efficacy: mastery experiences, vicarious experiences, social persuasion, and affective states.

Mastery experiences are situations or activities that enable teachers to achieve success, particularly in the context of improving student outcomes in various aspects, including well-being and academic achievement (Bandura, 1977; de Carvalho et al., 2023; Loughland & Nguyen, 2020). These experiences are marked by the successful accomplishment of challenging tasks or performance, often involving the development of instructional skills and capabilities (Loughland & Ryan, 2020). Integrating theory and practice, facilitated by an explicit theory of action, plays a pivotal role in creating these mastery experiences (Loughland & Nguyen, 2020). Moreover, mastery experiences result from consistently applying new knowledge, skills, and strategies, leading to repeated successes in mastering new or challenging activities (de Carvalho et al., 2023).

These experiences go beyond mere success; they also involve facing adversity and overcoming obstacles, fostering a sense of resilience and accomplishment (de Carvalho et al., 2023). As a result of successful mastery experiences, teachers change their behavior and notably experience an increase in their efficacy beliefs (Bandura, 1977). These beliefs are characterized by robust convictions about collective competence and effectiveness, further contributing to the development of CTE. Mastery experiences are closely intertwined with the principles of

effective teacher PL, especially when they focus on improving student outcomes and are structured to encourage participants to persevere, overcome challenges, and produce desired results.

Vicarious experiences refer to the process through which teachers and educational leaders learn from observing the actions and outcomes of their peers (Bandura, 1977; de Carvalho et al., 2023; Donohoo et al., 2020; Loughland & Nguyen, 2020; Loughland & Ryan, 2020). These experiences are marked by teachers witnessing demonstrations of effective skills and strategies, which are then related to their performance and that of their colleagues (Darling-Hammond et al., 2017). Vicarious experiences are fundamental in bolstering CTE beliefs (Bandura, 1977). These experiences support the transmission of knowledge and expertise, convince individuals of their efficacy, mitigate the impact of direct failure, and sustain efforts to perform proficiently (Bandura, 1977).

Moreover, vicarious experiences extend beyond mere observation and can encompass various activities, such as collaborative planning, in-the-action mentoring, and reflective discussions (Loughland & Nguyen, 2020). These activities also contribute significantly to developing a heightened sense of CTE among educators, particularly in specific domains like primary science. In essence, vicarious experiences are an essential source for strengthening CTE, as they offer opportunities for learning from the successes and expertise of peers, which, in turn, positively impact teachers' beliefs in their collective capacity to affect educational outcomes (de Carvalho et al., 2023).

Social persuasion involves fostering a shared sense of purpose and vision among educators (Bandura, 1977; Donohoo et al., 2020; Loughland & Nguyen, 2020; Loughland & Ryan, 2020). This concept is closely aligned with the idea of bringing teachers together with a

compelling vision and a feasible, collaborative plan to achieve their educational goals (Loughland & Nguyen, 2020). Social persuasion is a critical source of CTE that impacts teachers' beliefs about their capabilities to achieve success. This source of efficacy is activated during collaborative PL aimed at promoting changes in knowledge and instructional practices (de Carvalho et al., 2023). This environment encourages teachers to work together, share feedback, and engage in reflective discussions and serves as a conduit for social persuasion (de Carvalho et al., 2023). The encouragement and support from credible others within a collaborative learning environment can significantly influence teachers' beliefs about their collective capacity to affect educational outcomes.

Lastly, affective states play a multifaceted role in shaping educators' collective confidence. On one hand, they serve as a powerful motivational force. Affective states as a motivational source of teacher collective efficacy, specifically when teachers perceive that their PL efforts positively impact student progress, leads to positive feelings and emotions (Bandura, 1977; Donohoo et al., 2020; Loughland & Nguyen, 2020). Teachers experience a sense of accomplishment, satisfaction, and motivation, ultimately raising their CTE (de Carvalho et al., 2023). On the other hand, affective states encompass the social-emotional dimensions that underpin effective relationships within an educational community (Loughland & Ryan, 2020). These dimensions include trust, respect, and dialogic approaches that value the contributions of all members, including teachers, students, and other stakeholders (de Carvalho et al., 2023). Such emotional aspects contribute to a positive and supportive school culture, which, in turn, influences teacher collective efficacy by creating an environment where teachers feel empowered and valued (Loughland & Ryan, 2020).



It is important to note that affective states, both emotional and physiological, are complex and can vary based on the specific circumstances in which they occur (Bandura, 1977). Affective states can present both negatively (e.g., tension, fear, or anger) and positively (e.g., happiness, satisfaction, or enjoyment) based on the context and one's perception of their capabilities (de Carvalho et al., 2023). Furthermore, teachers' beliefs about their capabilities could significantly affect how they experience stress in challenging situations and their overall motivation. Teachers who believe they can manage and succeed in the face of challenges are likelier to experience lower stress and higher motivation, and those who doubt their abilities might experience higher anxiety and stress (de Carvalho et al., 2023).

Collective teacher efficacy extends individual self-efficacy to encompass teachers' beliefs in their teams' or faculty's ability to achieve specific educational outcomes. Positive school experiences enhance collective efficacy, impacting individual teacher self-efficacy (Goddard & Goddard, 2001; Tschannen-Moran & Barr, 2004). Schools with high collective efficacy set challenging goals, elevating individual teacher self-efficacy (Goddard et al., 2000). Limited research explored the relationship between collective and individual teacher efficacy but existing studies suggested positive connections (Goddard, 2002; Tschannen-Moran & Barr, 2004). However, CTE furthered this by emphasizing the collective power of educators working together to enhance student achievement. This collective belief was not merely the sum of individual beliefs but represented a shared confidence that the group can accomplish goals together.

Goddard and Goddard (2001) examined CTE's impact on student outcomes. Their research found that schools with higher levels of CTE were more likely to have improved student achievement. These findings supported the idea that teachers could create a more conducive learning environment with a shared belief in their abilities. Building upon the conclusions from

Goddard and Goddard's study, it is essential to recognize the broader educational context within which CTE operates.

### **School Factors and Collective Teacher Efficacy**

In the realm of CTE, a comprehensive understanding extends beyond individual experiences. Donohoo et al. (2020) delineated the traditional sources of CTE including mastery experiences, vicarious experiences, verbal persuasion, and affective states, emphasizing educators' past encounters as remote influencers. However, their groundbreaking research delved deeper, moving beyond mere reflections on the past by exploring the malleable aspects of CTE, shedding light on the pivotal role of contextual factors—specifically, school processes and the overall school environment (Anderson et al., 2023; Donohoo et al., 2020). These dynamic elements were identified as proximate sources of CTE and acknowledged for their ongoing impact on the teaching environment (Donohoo et al., 2020). This nuanced perspective transcended Bandura's (1977) original four sources, emphasizing the intricate interplay between cognitive processes and the contextual fabric within educational settings. These structures transcended isolated initiatives, advocating for systemic approaches that empower teachers to collaborate effectively (Anderson et al., 2023). By aligning these foundational structures to nurture CTE, schools could cultivate a profoundly positive and transformative school culture while enhancing student outcomes.

Using an analogy, we can liken CTE's impact on student outcomes to a thriving alpine forest ecosystem. Just as alpine forests flourish through the cooperation of diverse components, CTE prospers when various malleable factors, within a school, work together harmoniously. Donohoo et al. (2020) explored these enabling factors, highlighting that cohesive teacher knowledge, supportive relationships, embedded reflective practices, and goal consensus created

fertile ground for CTE growth. Similar to the interconnected components of a forest sustaining life, these enabling factors empower educators to collectively nurture improved student learning and success.

If CTE impacts student outcomes the most, helping all students flourish, we can compare this influence to a healthy alpine forest. Alpine forests do not just flourish independently; the interconnected web of towering trees, lush undergrowth, and flowing streams support each other, creating a thriving forest. The same is true for CTE; the malleable factors within a school are identified to enable and cultivate collective belief in each other (Anderson et al., 2023; Donohoo et al., 2020). Just as the diverse ecosystem of a forest thrives through cooperation and symbiosis, the collective efficacy of educators flourishes when these factors work together harmoniously. Each element in the forest, from the towering trees to the smallest organisms, contributes to the overall vitality of the ecosystem. Similarly, when interwoven and aligned, factors such as cohesive teacher knowledge, supportive and empowering relationships, embedded reflective practices, and goal consensus create a fertile ground for the growth of CTE (Anderson et al., 2023; Donohoo et al., 2020). Like the forest, where every component plays a role in sustaining life, these enabling factors work together empowering educators to nurture and cultivate the potential for improved student learning and success.

Donohoo et al. (2020) delved into the critical aspect of school conditions and their role in enabling and cultivating CTE. Their work emphasized that CTE is not solely dependent on the beliefs and collaboration of teachers but is also profoundly influenced by the organizational structures within schools. The research highlighted the importance of creating school environments that foster trust, encourage collaboration, and provide opportunities for educators to engage in meaningful PL collectively (Donohoo et al., 2020). These structures go beyond

individual initiatives and emphasize systemic approaches that empower teachers to work together effectively. Through their research, Donohoo et al. shed light on the significance of aligning school structures to nurture CTE, ultimately leading to improved student outcomes and a more positive school culture.

### ***Empowered Teachers***

As defined in the literature, empowered teachers are educators who exhibit a heightened sense of agency, autonomy, and influence in their professional roles (Smylie, 1988). This empowerment extends to their ability to make decisions about their instructional practices, shape classroom environments, and impact overall student learning experiences. Additionally, empowered teachers actively engage in school-wide decision-making processes and contribute significantly to the broader educational community (Marks & Louis, 1997).

Donohoo et al. (2018) explored the concept of empowered teachers within the context of CTE. They argued that empowered teachers are more likely to engage in collaborative practices, share their expertise, and contribute to a culture of continuous improvement within their educational institutions (Fullan & Hargreaves, 2012). Furthermore, research indicated that when teachers felt empowered, they were more inclined to participate in PL communities (Goddard et al., 2007), engage in reflective practices (Schussler et al., 2016), and collaborate effectively with their colleagues (Bryk & Schneider, 2002). This active involvement and shared sense of agency contribute significantly to developing and reinforcing CTE within a school or educational organization.

### ***Supportive Leadership***

Supportive leadership references the perception that school leaders protect staff from extraneous tasks and distractions and recognize staff accomplishments (Donohoo et al., 2020).

This leadership style fosters a positive and collaborative school culture where educators feel valued, empowered, and motivated to improve their instructional practices (Hallinger, 2011). Hattie (2012) identified supportive leadership as an essential enabling factor of CTE. Research conducted by Donohoo et al. (2018) highlighted the significant impact of supportive leadership on teacher efficacy and, by extension, student outcomes. Supportive leaders create an environment where teachers feel safe to take risks, collaborate with their peers, and engage in PL communities (Perry & McConney, 2010). This supportive environment fosters a sense of collective efficacy where teachers believe their collaborative efforts can make a difference in student learning (Donohoo et al., 2018).

### ***Embedded Reflective Practices***

In education, embedded reflective practices refer to the systematic processes by which teams of educators collaboratively examine various sources of student evidence and feedback to inform and enhance their instructional practices (Donohoo et al., 2020). These practices involve teachers consistently engaging in reflective thinking, self-assessment, and peer feedback to improve teaching and learning outcomes. When effectively implemented, embedded reflective practices cultivate a culture of ongoing self-reflection and data-driven decision-making among educators at the school level and within their classrooms.

Donohoo et al. (2018) found how embedded reflective practices enabled CTE by providing educators with a structured mechanism to examine student evidence and data collaboratively, identify areas for improvement, and collectively develop strategies to enhance teaching practices (Goddard et al., 2015). Donohoo et al. (2020) and others highlighted the positive impact of embedded reflective practices on teacher collaboration, professional growth, and student outcomes. These practices create a supportive environment where educators

routinely share insights, engage in meaningful discussions, and use evidence-based practices to inform their teaching. By collectively analyzing student data and reflecting on their instructional approaches, educators foster a strong sense of collective efficacy where they believe in their collective capacity to make a difference in student learning.

### ***Cohesive Teacher Knowledge***

Cohesive teacher knowledge refers to the collective awareness and consensus among staff members regarding what constitutes effective teaching practices (Donohoo et al., 2020). It signifies a shared understanding of best practices, instructional strategies, and teaching approaches within a school or educational organization. Cohesive teacher knowledge is critical to effective professional development and collaborative efforts among educators.

Donohoo et al.'s work (2020) emphasized the importance of cohesive teacher knowledge in enabling CTE, which is the shared belief among educators that their combined actions can significantly impact student learning and achievement (Tschannen-Moran & Barr, 2004). When educators share a common understanding of effective teaching practices and instructional strategies, it enhances their collective confidence in their ability to positively influence student outcomes.

Research conducted by Cantrell and Callaway (2008), Goddard et al. (2004), Gully et al. (2002), Little (1990), Newman et al. (1989), and Schechter and Qadach (2012) underscored the role of cohesive teacher knowledge in supporting CTE. Leaders play a crucial role in building and sustaining cohesive teacher knowledge by providing opportunities for staff to engage in collaborative efforts focused on current practices and targeted improvements (Cantrell & Callaway, 2008). Cohesive teams that share information and possess a common understanding of effective teaching practices are more likely to reach complex goals (Locke & Latham, 2006) and

experience mastery in their teaching endeavors (Ross et al., 2004). This shared knowledge enhances instruction quality and contributes to a culture of collaboration and shared responsibility within an educational institution. Educators who collectively believe in their capacity to apply effective teaching practices are more likely to work collaboratively towards improved teaching and learning outcomes, fostering and sustaining CTE.

### ***Goal Consensus***

Goal consensus represents a unified understanding and agreement among educators within a school or educational institution regarding objectives and aspirations for student learning, professional development, and school improvement (Donohoo et al., 2020). It signifies a shared commitment to common goals, fostering a shared vision and purpose among educators (Kruse & Louis, 1995). This shared vision enhances mutual commitment and belonging, essential components of CTE, as found in research by Tschannen-Moran and Barr (2004). Moreover, goal consensus promotes collaborative efforts and problem-solving (Bryk & Schneider, 2002), allowing educators to work together to address challenges and reinforce their collective efficacy, as demonstrated in a study by Goddard et al. (2007). Additionally, goal consensus involves clear accountability mechanisms and progress measurement (Kruse & Louis, 1995), enabling educators to track their effectiveness and make data-informed decisions, reinforcing their belief in their collective capacity to achieve goals, as indicated through research by Goddard et al. Overall, goal consensus plays a crucial role in unifying educators and promoting collaborative, practical efforts to achieve shared objectives.

### **Connecting Collective Teacher Efficacy and Professional Learning**

Ralph Waldo Emerson (2019) once said, "Nature always wears the colors of the spirit" (p. 5). Just as the spirit of mountain climbers colors the way they perceive and experience the

forest, the spirit of educators, as they engage in professional learning, shapes the landscape of their educational community, possibly nurturing CTE. In 2018, Donohoo's review of research studying the intersection of CTE and PL found a gap in our understanding of how effective proximate PL structures can be harnessed to nurture and enhance CTE. Since then, a few studies have explored the direct link between PL and CTE but focused on the remote sources of CTE instead of the proximate sources. Loughland and Ryan (2020) revealed that the four motivational constructs of teacher collective efficacy intertwine with the principles of effective teacher PL but did not focus on how in-house PL and school characteristics intertwine to cultivate CTE. de Carvalho et al. (2023) conducted a case study on the relationship between PL and the motivational constructs of CTE to "identify structures and processes that have potential to contribute to CTE" (p. 280). The findings implied that PL could influence efficacy perceptions by employing a well-structured combination of activities to stimulate motivational constructs enhanced by specific temporal and organizational structures that facilitate learning and transformation of practical skills (de Carvalho et al., 2023). Loughland and Nguyen (2020) also conducted a case study examining whether CTE is developed through effective PL. When the PL program consisted of collaborative planning, in-the-action teacher mentoring, and critical collaborative, reflective discussion, two remote sources of CTE were cultivated: mastery and vicarious experiences. In contrast, the other remote sources of CTE, social persuasion and affective states, were less apparent (Loughland & Nguyen, 2020).

Research exploring similar connections between PL and CTE but focused on the proximate sources of CTE, as defined by Donohoo et al. (2020), is necessary to further develop a practical approach to cultivating CTE through PL. By utilizing the research, we can find connections between the variables of collective teacher efficacy and the factors of effective



professional development (see Table 2). This research explored the crucial connection between PL and CTE, aiming to create a practical guide for schools. By understanding and enhancing this link, we empower educators, fostering their confidence and positively impacting their educational communities. Ultimately, our goal is to improve student achievement by strengthening teachers' collective belief in their abilities, creating a positive cycle of educational growth and empowerment.

**Table 2**

*Connecting Collective Teacher Efficacy and Professional Learning*

Proximate Factors for Collective Teacher Efficacy	Factors of Effective Professional Development
Cohesive Teacher Knowledge	Collaboration, Content-Focused, Modeling
Embedded Reflective Practices	Active Learning Strategies, Coaching, Collaboration, Feedback and Reflection, Sustained Duration
Empowered Teachers	Active Learning Strategies, Coaching, Collaboration, Content-Focused, Modeling
Goal Consensus	Coaching, Collaboration, Modeling, Sustained Duration
Supportive Leadership	Coaching, Collaboration, Feedback and Reflection, Modeling, Sustained Duration

*Note.* Anderson et al. (2023), Darling-Hammond et al. (2017), Donohoo et al. (2020).

### Summary and Conclusion

In 2009, the AIS administration shifted the institutional approach to professional development. Unlike traditional external expert-led sessions, AIS valued its faculty's expertise. This change conveyed faculty's role in school improvement and their capacity for peer-to-peer

learning. Educational Research at Alpine, established in 2013, supported the ESI and other professional learning initiatives created to support the needs of Alpine staff.

The ESI started by recruiting faculty but evolved into a sought-after program with higher-quality projects. All AIS educators could apply to ESI provided they collaborated, hosted ERA Learning Sessions, and shared their work. The ESI empowered teachers through classroom-based, autonomous, research-backed professional learning, enriching AIS's academic environment. The ESI signified AIS's commitment to faculty-driven learning experiences.

Professional learning at AIS reflects the ever-evolving nature of education. Effective PL is structured to improve teacher knowledge and practices and ultimately enhance student outcomes (Darling-Hammond et al., 2017). Darling-Hammond et al.'s (2017) review of research uncovered a positive link between teacher-professional learning, teaching practices, and student outcomes and identified seven standard features of effective professional learning. Content-focused PL aligns with teachers' subject matter, emphasizing curriculum and assessment quality (Foster, 2022). Active learning strategies engage educators directly, mirroring adult learning theory principles (Merriam & Bierema, 2013). Collaboration in PL provides opportunities to share resources and problem-solving in job-embedded contexts (Birman et al., 2000). Models and modeling showcase effective practices, coaching, and expert support to enhance growth (Kraft et al., 2018). Feedback and reflection are essential (Wisniewski et al., 2020) to educator growth. Sustained PL is essential for meaningful development (Desimone & Garet, 2015).

Collective teacher efficacy (CTE) is a vital factor in education, influenced by various sources. Traditionally, it is associated with individual experiences, such as mastery experiences, vicarious experiences, verbal persuasion, and affective states (Donohoo et al., 2020). Recent research emphasized the role of contextual factors in schools, like school processes and the

overall environment, as key sources of CTE (Anderson et al., 2023; Donohoo et al., 2020). This view expanded on Bandura's (1977) original sources, emphasizing the interaction between cognitive processes and the educational context and advocating for systemic approaches to empower teachers to collaborate effectively (Anderson et al., 2023). Empowered teachers, who have a sense of agency and influence in their roles, are more likely to engage in collaborative practices, professional learning communities, and effective collaboration (Donohoo et al., 2020). Supportive leadership, which recognizes staff accomplishments and protects them from distractions, significantly impacts teacher efficacy and student outcomes (Donohoo et al., 2020). Embedded reflective practices involve educators examining student evidence and feedback collaboratively to improve teaching and learning outcomes (Donohoo et al., 2020). Cohesive teacher knowledge, where educators share an understanding of effective teaching practices, and goal consensus, where educators agree on objectives for student learning, professional development, and school improvement, fosters a shared vision and collaborative efforts, contributing to a culture of collective efficacy (Donohoo et al., 2020). When aligned and harmonious, these factors empower educators to collectively improve student learning and success within CTE.

The relationship between PL and CTE has gained attention in educational research. Donohoo's 2018 review identified a gap in understanding the connection between proximate PL structures and CTE. Subsequent studies, like Loughland and Ryan (2020) and de Carvalho et al. (2023), explored aspects of PL and its impact on remote CTE sources but have yet to delve into proximate CTE sources. de Carvalho et al. (2023) conducted a case study that revealed the potential for PL to influence efficacy perceptions through well-structured activities. Loughland and Nguyen (2020) found that specific PL components, like collaborative planning and

mentoring, contributed to the cultivation of mastery and vicarious experiences but had less impact on social persuasion and affective states.

Research focusing on proximate CTE sources, as defined by Donohoo et al. (2020), is crucial to further develop practical approaches for cultivating CTE through PL. This research aimed to establish a clear connection between CTE variables and factors of effective PL. By understanding and enhancing this link, educators could be empowered, leading to improved student achievement and a positive cycle of growth and efficacy in education.

CHAPTER III  
METHODOLOGY

**Introduction**

The purpose of this study was to interpret and evaluate how a specific model of professional learning (PL) cultivated collective teacher efficacy (CTE) through the identified enabling factors. There is a gap between theoretical connections and practical implementation of effective teacher professional learning and collective teacher efficacy. Several studies have shown a solid theoretical link between these two concepts, but practical details are needed to create a guide for schools. Effective PL and CTE emphasize collaboration, focus on current practice, and improve student outcomes. A PL program at Alpine International School (AIS) in Europe started in 2014 and emphasizes the same variables. This PL experience is called the Exploring Scholars Initiative (ESI) and might serve as a practical guide to utilizing professional learning to cultivate collective teacher efficacy. To help interpret and evaluate the link between proximate sources of CTE and factors of ESI, this research sought to answer the following questions:

- Q1 How do AIS teachers' experiences with the Exploring Scholars Initiative relate to their measure of collective teacher efficacy?
- Q2 How does the Exploring Scholars Initiative support the five factors related to fostering collective teacher efficacy: empowered teachers, embedded reflective practices, cohesive teacher knowledge, goal consensus, and supportive leadership?

### **Educational Connoisseurship and Criticism**

“Experience, for Dewey, is the means through which educational processes work; hence, understanding education requires appraisal of the kind of experience individuals have” (Eisner, 2017, p. 90). The researcher employed Elliot Eisner’s (2017) qualitative approach to research, educational connoisseurship, and criticism to understand ESI’s holistic effect on CTE at AIS. Connoisseurship is “using one’s senses to apprehend present experience and making fine-grained distinctions” (Uhrmacher et al., 2016, p. 133) while appreciating the details and nuances affecting the experience (Eisner, 2002) of AIS staff through ESI.

#### **The Structure of Educational Connoisseurship**

To employ these skills, a researcher requires access, presence, the ability to notice, and an understanding of the topic through previous experiences. These skills require a deep understanding of the school’s ecology regarding ESI and CTE. Eisner (2017) recognized the complex environment of a school and identified five dimensions of the school’s ecology to help focus the deep understanding necessary for educational connoisseurship. The dimensions included the intentional, the structural, the curricular, the pedagogical, and the evaluative. These dimensions intertwine as living systems, constructing the school’s culture (Eisner, 2002, 2017; Uhrmacher et al., 2016). To recognize and focus on the school ecology directly related to the effects of the ESI on collective teacher efficacy, the researcher implemented the ‘instructional arc’ as defined by Uhrmacher et al. (2016). The instructional arc borrows intentions from Eisner’s ecology of schooling and focuses on three aspects of ESI’s curriculum: intentional, operational, and received. Through this framework, connoisseurship illuminates the nuances of the ESI, setting the stage better for criticism.

- The intentional curriculum refers to the intentional dimension of Eisner's school ecology, more specifically what the learning program intends to accomplish (Eisner, 1988, 2002, 2017; Uhrmacher et al., 2016) and led the educational connoisseur to wonder what the school's vision and mission statements are, what the intention or goal behind ESI is, and are these missions and objectives aligned to better help AIS staff know the direction for their growth. Exploring this requires the connoisseur to ask if ERA leaders and the AIS administrations want/plan to happen (Uhrmacher et al., 2016).
- The operational curriculum is a convergence of the structural, curricular, and pedagogical dimensions of Eisner's school ecology. The structural dimension focused on how the school and daily processes are organized (Eisner, 1988, 2002, 2017; Uhrmacher et al., 2016) and prompted the educational connoisseur to clarify ESI's application process, ask how ESI participants fit collaboration with colleagues into their day, and how ERA leaders support participants to reach their learning goals. The curricular dimension illuminated the quality of curriculum content and goals and the activities utilized to engage learners in it (Eisner, 1988, 2002, 2017; McConnell Moroye et al., 2016) and invited the educational connoisseur to discuss how all AIS educators are interpreting ESI's curriculum, how all AIS educators are encountering this content, and how connected ESI's curriculum is linked to the professional development offered to all AIS educators. The pedagogical dimension highlighted how consistent teaching practices support the aims and goals of the program (Eisner, 1988, 2002, 2017; Uhrmacher et al., 2016) and encouraged the educational connoisseur to observe the interactions

between ERA leaders, Explorative Scholars, AIS educators, and AIS administrators. Exploring this lens requires the connoisseur to ask what actually happens (Uhrmacher et al., 2016).

- The received curriculum focused on how the program helped the students grow (Uhrmacher et al., 2016) and guided the educational connoisseur to investigate how the ESI encouraged AIS staff to learn. Employing this lens requires the connoisseur to ask what the Exploring Scholars and Alpine staff learned or "took away" from the experience (Uhrmacher et al., 2016).

In essence, the instructional arc provided the connoisseur a "way of seeing what actually happens" (Uhrmacher et al., 2016, p. 655) with an emphasis on identifying alignment or deviation between intentions and actions in the Exploring Scholars Initiative. Once the connoisseur crafted the epistemic view of the experience, it was time to reeducate the perception through criticism (Eisner, 2017).

### **The Structure of Educational Criticism**

Criticism is "the disclosure of what we learned through our connoisseurship" (Uhrmacher et al., 2016, loc. 140) by transforming the perceived qualities into a "public form that illuminates, interprets, and appraises the qualities that have been experienced" (Eisner, 2017, p. 86). To help disclose all the researcher perceived, Eisner (2002) identified a set of tools for educational criticism, including four dimensions: description, interpretation, evaluation, and thematics. Each dimension plays a role in making the information gathered from the study meaningful enough to become data (Eisner, 1988). Uhrmacher et al. (2016) went on to further explain each part of this structure and how each part brought the data to life:



- Description calls for a rich, detailed, expressive, and purposeful account of the evidence to build a base for interpretation, provide a context of the research and its applications, and “enable readers to visualize what a place or process is like” (Eisner, 2017, Educational Criticism).
- Interpretation seeks to “explicate the meanings of descriptive data” (Uhrmacher et al., 2016, p. 1016), connecting the living experiences to the conceptual framework(s) undergirding the research.
- Evaluation asks about the value of the data while embracing the intricate details and honoring the complexity of the educational situation.
- Thematics “articulate the patterns, big ideas, and anticipatory frameworks for other educational situations” (Uhrmacher et al., 2016, p. 1295) and provide a space to demonstrate trustworthiness.

Educational criticism aims to understand the participants' perspective within their social and cultural context; thus, it is beneficial to explore teacher efficacy within the context of the school's ecology. Educational criticism goes beyond other mixed-methods and quantitative studies as it highlights the ESI within AIS's specific school context, evaluating the effects of the program and how the PL program cultivates CTE by providing the proximate sources of CTE, including the subtle dynamics and interactions between all Alpine staff. Still, Uhrmacher et al. (2016) highlight one characteristic of educational criticism, setting this qualitative method apart from the others: the critic's ability to layer their outsider perspective as they seek to understand the insider's point of view. Thus, educational criticism is best used to “enhance the perception and understanding of the qualities” (Flinders & Eisner, 1994, p. 355) found in the Exploring Scholars Initiative.

### **Researcher's Stance**

The researcher's unique perspective, derived from their diverse roles as a high school educator, an experienced International Baccalaureate (IB) teacher, a current administrator, and a professional learning lead, forms a robust foundation for establishing their stand and credibility. This comprehensive background collectively shaped their perspective and approach to evaluating professional learning programs, providing a nuanced understanding of the educational landscape.

First, the researcher's 11 years of experience as a high school educator has given them direct insight into the intricate dynamics of the classroom and a wealth of practical knowledge. This practical knowledge allowed the researcher to draw connections between professional learning initiatives and their real-world impact on teaching and student achievement. Furthermore, the researcher's background as an IB teacher for seven years equipped them with expertise in advanced teaching methodologies, curriculum design, and assessment practices and knowledge of the program and what IB expects of educators and students. The IB program's reputation for academic rigor and innovation also means the researcher was well-versed in pedagogical approaches that foster deep learning and critical thinking. This expertise positioned them to critically assess the quality and effectiveness of professional learning programs, mainly when these programs aim to enhance instruction in academically demanding settings.

The researcher's experience as an administrator afforded them insights into strategic decision-making related to school policies, curriculum development, and professional learning programs. This administrative perspective enabled the researcher to evaluate the alignment of professional learning initiatives with a school's overarching objectives and administrative priorities. It underscored the significance of coherence between professional learning and a school's broader mission. Administrators experience also entailed direct participation in creating

and implementing professional learning programs at the school and district levels. This hands-on experience equipped the researcher to understand the design and delivery of effective learning experiences for educators. The researcher leveraged this expertise to critically appraise the alignment of the PL program under investigation with established best practices in PL.

Beyond these professional roles, the researcher witnessed the practical impact of various professional learning initiatives. This experience allowed the researcher to bridge the gap between the theoretical aspects of educational research and the real-world dynamics of teaching and school leadership, demonstrating their unique ability to translate research findings into practical applications. It positioned them to provide nuanced and pragmatic feedback based on the day-to-day realities of education.

Lastly, the researcher was a guest at Alpine International School, exploring the positive effects of the Exploring Scholars Initiative. Thus, the primary focus remained on the beneficial impacts of ES, along with the favorable aspects of Alpine's school culture and collective teacher efficacy.

In sum, the researcher's multifaceted background in education, spanning classroom instruction, school leadership, and professional learning, contributed to a comprehensive and well-rounded researcher's stance. This stance is rosy as the positive aspects of both Alpine and ESI remained the focus throughout data analysis. It enabled them to consider the diverse needs and challenges of different stakeholders within the educational ecosystem while assessing the CTE cultivated by PL programs.

### **Conceptual and Interpretive Frameworks**

As the theoretical underpinning of this research, Bandura's (1977) social cognitive theory provided a robust framework for comprehending the dynamics that influence CTE within the

context of a school community. Social cognitive theory explores the intricate interplay between environmental and cognitive factors, delving into how they collectively influence human learning and behavior (Bandura, 1977). This theory underscores that individuals, including teachers, are not isolated entities but are inherently influenced by their social environment. For example, it is crucial to recognize that teachers' beliefs regarding the collective capability of the faculty have a profound impact on their motivation and expectations for successful teaching. When teachers have confidence in the collective efficacy of their peers, they tend to establish higher expectations for their teaching practices and are more motivated to excel.

Aligned with social cognitive theory, this research primarily honed in on the environmental factors that influenced CTE, as identified by Donohoo et al. (2020). These adaptable school factors, including supportive leadership, cohesive teacher knowledge, goal consensus, embedded reflective practices, and empowered teachers were the key elements through which the study was conducted. The aim of this research was to grasp how these environmental factors, deeply rooted in social cognitive theory, shaped the development of CTE within an educational setting.

The 'instructional arc' served as a guiding framework, focusing the social cognitive lens on the curriculum employed by ESI (Uhrmacher et al., 2016) and the three aspects of the curriculum: the intended curriculum, the operational curriculum, and the received curriculum (Uhrmacher et al., 2016). This framework was designed to shed light on these topics by answering three key questions: 'What does the teacher plan/desire to happen?', 'What actually happened?', and 'What did students learn or 'take away' from the experience?' (Uhrmacher et al., 2016, p. 632). This lens provided an opportunity to understand how AIS administrators' beliefs and intentions shaped the educative experiences AIS educators received, while also uncovering

all other possible experiences embedded in the curriculum, such as the null curriculum (Eisner, 2002) and hidden curriculum (Uhrmacher et al., 2016) by observing the relationship between the intended, operationalized and received curricula (Uhrmacher et al., 2016).

### **Participants**

Alpine International School (AIS or Alpine) is a private boarding school serving grades 7th-12th, with approximately 300 students from around 60 countries enrolled each year. After opening its doors in 1961, AIS continued to grow and receive accolades for continued excellence in education. For the 2023/2024 school year, approximately 75 staff members from around the world, of which 50 hold advanced degrees, and 25 have over 20 years of experience, are serving the diverse student body. With a culture of participation in innovative education practices, ESI is available to all Alpine staff and provides the opportunity to be recognized by the Alpine administrators and work directly with the ERA leaders in efforts to grow as teacher practitioners and research authors, publishing several research articles each year. In fact, since ESI's pilot school year, 2015-2016, 46 Alpine educators had completed the program, finishing at least one passion project a year as their professional development. Thus, the participants for this study were all the educators, administrators, and ERA leaders employed at AIS. Site permission and Institutional Review Board approvals were obtained prior to conducting this study (see Appendix A).

### **Data Collection and Analysis**

A site visit was necessary to 'see' and appreciate the Exploring Scholars Initiative at AIS. Thus, the researcher scheduled a time with the Director of Research to be a Global Scholar and was provided access to the AIS campus, classrooms, and staff for two weeks. The onsite visit lasted from January 6, 2024, to January 19, 2024. Once on campus, the researcher collected

artifacts, observed, interviewed educators and administrators, and surveyed teachers to create a vivid picture of all intended facets of the professional learning program or a ‘state of being’ of the ESI as AIS has presented to the outside world. To fit this qualitative data collection within the two-week time frame constrained by AIS’s tight schedule, the researcher worked closely with the Director of Research to schedule interviews, join in on educational experiences that served as observations, collect artifacts, and send a survey to teachers through a venue Alpine staff are familiar with. Each form of data collection supported all parts of the instructional arc framework.

### **Exploring Scholars Initiative’s Intentional Curriculum Data Collection and Instrumentation**

Initial research focused on the intended experiences and outcomes (Uhrmacher et al., 2016) of ESI by asking, “What are the intended goals or objectives that the key figures at AIS have in mind for the staff at AIS as part of the Exploring Scholars Initiative?” as part of a reflexive framework three different types of data collections provided evidence to the holistic picture: artifact collection, direct observation, and semi-structured interviews. These data provided insight fueling the creation of the critic’s etic perspective of AIS and the ESI.

#### ***Artifact Collection***

Artifacts collected included three emails, one flyer, one professional learning handbook, an application form, and a scheduling tool for ERA leaders and teacher growth. These artifacts were selected to provide a holistic view of how ESI’s practices and conditions are conveyed to current educators at AIS and educationists outside of AIS (Best & Kahn, 2006). The collected documents were then coded and interpreted after the onsite visit with provisional coding (Saldaña, 2013) using Donohoo et al.’s (2020) factors of enabling collective teacher efficacy as the predetermined list of codes, specifically supportive leadership, cohesive teacher knowledge,

goal consensus, embedded reflective practices, and empowered teachers (Anderson et al., 2023; Donohoo et al., 2020).

### ***Direct Observation***

Observations included school-wide or small group events outside the regular classroom, focused on educational programming, professional learning, and the ESI were utilized to create the critic's etic perspective of the ESI. These events included one informal ESI pop-in lasting 30 minutes, one school-wide assembly lasting 45 minutes, and one ERA Learning Session lasting 45 minutes. All opportunities to observe the Alpine staff interacting with peers, ERA leaders, Alpine administration, and Alpine students were introduced to the researcher and scheduled through the Director of Research. During these observations, the researcher created field notes “detailing descriptions of people's activities, actions, and the full range of interpersonal interactions” (Best & Kahn, 2006, p. 247). These field notes were coded and interpreted after the onsite visit with provisional coding (Saldaña, 2013) using Donohoo et al.’s (2020) factors of enabling collective teacher efficacy as the predetermined list of codes, specifically supportive leadership, cohesive teacher knowledge, goal consensus, embedded reflective practices, and empowered teachers (Anderson et al., 2023; Donohoo et al., 2020).

### ***Semi-Structured Interviews***

The Director of Research at ERA, who also founded ESI, and four Alpine administrators with varying degrees of interaction in the ESI all participated in semi-structured interviews. These interviews gathered not only the historical intention behind ESI but also the evolution of the PL program as AIS has also evolved. The critic utilized questions (see Appendix B) centered around the objectives of ESI and AIS to directly address the intentions of the ESI connected to all five proximate sources of CTE as identified by Donohoo et al. (2020) in ESI. On average, the

interviews lasted 45 minutes, with the shortest lasting about 30 minutes and the longest lasting about 60 minutes. These five individuals' experiences and knowledge were recorded via Notability, which also served as the platform for transcription. The transcribed interviews were coded and interpreted after the onsite visit with provisional coding (Saldaña, 2013) using Donohoo et al.'s (2020) factors of enabling collective teacher efficacy as the predetermined list of codes, specifically supportive leadership, cohesive teacher knowledge, goal consensus, embedded reflective practices, and empowered teachers (Anderson et al., 2023; Donohoo et al., 2020).

### **Exploring Scholars Initiative's Operational Curriculum Data Collection and Instrumentation**

Here, the critic was uncovering the actual experiences of Exploring Scholars and Alpine staff (Eisner, 2017; Uhrmacher et al., 2016) by finding, "What tangible experiences did Alpine staff undergo as the Exploring Scholars Initiative unfolded?" further exploring the reflexive framework. The researcher collected three different types of data to measure the collective efficacy of Alpine staff and describe educators' lived experiences with ESI: artifacts, direct observations, and semi-structured interviews.

#### ***Artifact Collection***

Collected artifacts consisted of nine applications submitted for the 2023/2024 Exploring Scholars Initiative, seven flyers sharing current passion projects, one set of notes on different project passion timelines from ERA leaders, two tools created by current Exploring Scholars, and one set of slides from an ERA Learning Session. The collected documents were coded and interpreted after the onsite visit with provisional coding (Saldaña, 2013) using Donohoo et al.'s (2020) factors of enabling collective teacher efficacy as the predetermined list of codes,



specifically supportive leadership, cohesive teacher knowledge, goal consensus, embedded reflective practices, and empowered teachers (Anderson et al., 2023; Donohoo et al., 2020).

### ***Direct Observation***

The ESI informal check-ins, classroom lessons approximately 45 minutes long from three Alpine educators that have completed a passion project for ESI, one faculty family meeting lasting 30 minutes, one school-wide assembly lasting 45 minutes, and about 45 minutes of the Group 4 Project as completed at AIS were observed. All opportunities to observe the Alpine staff interacting with peers and students were introduced to the researcher and scheduled through the Director of Research. In each observation, the critic was introduced but remained as an ‘outsider’ to the interaction, not engaging with Alpine staff besides being present throughout the event (Best & Kahn, 2006). The purpose of the observation was known to the Alpine staff, as the critic looked for evidence of CTE and elements of previously completed ESI passion projects. Field notes were coded and interpreted after the onsite visit with provisional coding (Saldaña, 2013) using Donohoo et al.’s (2020) factors of enabling collective teacher efficacy as the predetermined list of codes, specifically supportive leadership, cohesive teacher knowledge, goal consensus, embedded reflective practices, and empowered teachers (Anderson et al., 2023; Donohoo et al., 2020).

### ***Semi-Structured Interviews***

Semi-structured interviews were conducted with the Director of Research at ERA, who also founded ESI, four Alpine administrators with varying degrees of interaction in the ES, seven current Exploring Scholars, and three past Exploring Scholars. These interviews gathered not only the historical intention behind ESI but also the evolution of the PL program as AIS has also evolved. The critic utilized questions (see Appendix B) centered around the lived experiences of

Exploring Scholars, ERA leaders, and Alpine administration as passion projects were completed to directly address how the learning journeys in ESI connected to all five proximate sources of CTE as identified by Donohoo et al. (2020) in ESI. On average, the interviews lasted 45 minutes, with the shortest lasting about 30 minutes and the longest lasting about 120 minutes. These five individuals' experiences and knowledge were recorded via Notability, which also served as the platform for transcription. The transcribed interviews were coded and interpreted after the onsite visit with provisional coding (Saldaña, 2013) using Donohoo et al.'s (2020) factors of enabling collective teacher efficacy as the predetermined list of codes, specifically supportive leadership, cohesive teacher knowledge, goal consensus, embedded reflective practices, and empowered teachers (Anderson et al., 2023; Donohoo et al., 2020).

### **Exploring Scholars Initiative's Received Curriculum Data Collection and Instrumentation**

After data around the intentional, structural, and curricular dimensions of the school were collected, the critics' focus shifted to the received curriculum (Uhrmacher et al., 2016) by asking, "What insights or lessons did Alpine staff gain from their experience with ESI?", the last part of the reflexive framework. Collecting data to answer these questions involved an online survey, semi-structured interviews with Alpine staff, direct observations, and artifact collection.

#### ***Online Survey***

An online survey adapted from the Collective Efficacy Scale by Goddard (2002), the Collective Teacher Beliefs Scale by Tschannen-Moran and Barr (2004), and the Enabling Conditions for Collective Efficacy Scale by Donohoo et al. (2020) was provided to all educators at AIS on January 15 utilizing an established routine implemented by ERA for all other surveys implemented at AIS. The survey was created using Google Forms, and an electronic consent statement was included (see Appendix C).

- Goddard's (2002) Collective Efficacy Scale (CES-SF) comprises 12 items equally distributed across two subscales: task complexity and group teaching competence, as seen in Table 3. These items are balanced, with six phrased negatively and six phrased positively. Task complexity, as defined in the instrument, pertains to teachers' perceptions of the challenges and opportunities inherent in their current teaching tasks, encompassing their beliefs about the level of support from students' homes and the community (Goddard, 2002). On the other hand, group teaching competence reflects judgments about a faculty's capabilities in various teaching situations, encompassing inferences about teaching methods, skills, training, and expertise (Goddard, 2002). Participants rated these items on a 6-point interval scale from *strongly disagree* to *strongly agree*. In a validation study by Goddard (2002), 452 teachers from 47 elementary schools within a large Midwestern school district participated. The results indicated that the instrument maintained strong internal consistency and exhibited criterion-related validity.
- Tschannen-Moran and Barr (2004) developed the Collective Teacher Beliefs Scale (CTBS), a 12-item assessment tool designed to gauge collective teacher efficacy. It encompasses two distinct subscales: instructional strategies and student discipline, as seen in Table 4. Collective teacher efficacy, as defined by this tool, is “the shared belief within a faculty regarding their collective capacity to impact student achievement” (Tschannen-Moran & Barr, 2004, p. 198). The survey prompts participants to provide feedback concerning their school's capabilities in instructional strategies and student discipline. Respondents use a 9-point Likert scale, with options ranging from *none at all* to *a great deal*. When

tested in a study involving 49 middle schools in Virginia, the CTBS displayed a high level of reliability. Furthermore, the scale demonstrated significant positive correlations with student achievement in mathematics, writing, and English through a multiple regression analysis. Notably, the measures of collective teacher efficacy exhibited no correlations with the socioeconomic status of the school, a consistency that aligns with the theoretical underpinnings of the construct. An overall CTE score was computed using a mean of all 12 items.

**Table 3**

*Collective Teacher Efficacy Short Form*

Item Number	Item	Subscale
CE-S 1	Teachers in the school are able to get through to the most difficult students	Group Teaching Competence
CE-S 2	Teachers here are confident they will be able to motivate their students	
CE-S 3	Teachers in this school truly believe every child can learn	
CE-S 4	If a child doesn't want to learn teachers here give up	
CE-S 5	Teachers here don't have the skills needed to produce meaningful student learning	
CE-S 12	Teachers in this school do not have the skills to deal with student disciplinary problems	Task Analysis
CE-S 6	These students come to school ready to learn	
CE-S 7	Homelife, with parents/guardians, provides so many advantages the students here are bound to learn	
CE-S 8	Students here just aren't motivated to learn	
CE-S 9	The opportunities in this community help ensure that these students will learn	
CE-S 10	Learning is more difficult at this school because students are worried about their safety	
CE-S 11	Drugs and alcohol abuse in the community make learning difficult for students here	

**Table 4***Collective Teacher Beliefs Scale*

Item Number	Item	Subscale
CTBS 1	How much can teachers in your school do to produce meaningful students learning?	Group Teaching Competence
CTBS 2	How much can your school do to get students to believe they can do well on schoolwork?	
CTBS 5	How much can teachers in your school do to help students master complex content?	
CTBS 6	How much can teachers in your school do to promote deep understanding of academic concepts?	
CTBS 9	How much can teachers in your school do to help students think critically?	
CTBS 11	How much can your school do to foster student creativity?	
CTBS 3	To what extent can teachers in your school make expectations clear about appropriate student behavior?	Task Analysis
CTBS 4	To what extent can school personnel in your school establish rules and procedures that facilitate learning?	
CTBS 7	How well can teachers in your school respond to defiant students?	
CTBS 8	How much can school personnel in your school do to control disruptive behavior?	
CTBS 10	How well can adults in your school get students to follow school rules?	
CTBS 12	How much can your school do to help students feel safe while they are at school?	

- Donohoo et al. (2020) designed and validated a teacher perception questionnaire, Enabling Conditions for Collective Teacher Efficacy Scale (EC-CTES). This 20-item questionnaire features five subscales to assess key variables: supportive leadership, empowered teachers, embedded reflective practices, cohesive teacher

knowledge, and goal consensus. The survey employs a 6-point interval scale, spanning from *strongly disagree* to *strongly agree*, encompassing four positive scale options (somewhat agree, agree, very much agree, strongly agree) and two negative scale options (strongly disagree and disagree).

In their research, Donohoo et al. (2020) performed a confirmatory factor analysis to validate the proposed factor structure of the EC-CTES. They collected data from 438 participants across 42 schools. The analysis yielded favorable results, demonstrating a good fit on various indices. Furthermore, Donohoo et al. argued that the instrument exhibited strong validity by aligning with prior research on collective teacher efficacy. As this instrument has been published with First Educational Resources (FIRST Education, 2023), specific questions and methods to quantify the results will not be provided.

As the researcher compiled three valid and reliable surveys together, responses for each survey, CES-SF, CTBS, and EC-CTES, underwent the prescribed steps for measuring the level of collective teacher efficacy and a *t*-test comparing responses from two identified groups, ESI Staff, consisting of Alpine staff currently in or have previously completed the Exploring Scholars Initiative, and Non-ESI Staff, consisting of Alpine staff that have no current or prior involvement with the Exploring Scholars Initiative. The CES-SF results were also analyzed to determine a *z*-score. Responses to open-ended questions were coded and interpreted after the onsite visit with provisional coding (Saldaña, 2013) using Donohoo et al.'s (2020) factors of enabling collective teacher efficacy as the predetermined list of codes, specifically supportive leadership, cohesive teacher knowledge, goal consensus, embedded reflective practices, and empowered teachers (Anderson et al., 2023; Donohoo et al., 2020).

### ***Semi-Structured Interviews***

Semi-structured interviews were conducted with seven current Exploring Scholars, three past Exploring Scholars, and two Alpine teachers who have not applied to be Exploring Scholars. All interviews were scheduled by the Director of Research at ERA to accommodate the schedules of the Alpine staff. These interviews gathered not only the historical intention behind ESI but also the evolution of the PL program as AIS has also evolved. The critic employed questions (refer to Appendix B) focused on the goals of ESI and AIS, as well as teachers' experiences associated with the professional learning program and the school, to appreciate the experiences of Alpine staff concerning all five immediate sources of CTE as identified by Donohoo et al. (2020). On average, the interviews lasted 45 minutes, with the shortest lasting about 30 minutes and the longest lasting about 120 minutes (about two hours). These 12 individuals' experiences and knowledge were recorded via Notability, which also served as the platform for transcription. The transcribed interviews were coded and interpreted after the onsite visit with provisional coding (Saldaña, 2013) using Donohoo et al.'s (2020) factors of enabling collective teacher efficacy as the predetermined list of codes, specifically supportive leadership, cohesive teacher knowledge, goal consensus, embedded reflective practices, and empowered teachers (Anderson et al., 2023; Donohoo et al., 2020).

### ***Direct Observation***

Observations were conducted of classroom lessons approximately 45 minutes long from three Alpine educators who have completed a passion project for ES, one faculty family meeting lasting 30 minutes, about 45 minutes of the Group 4 Project as completed at AIS, the first group meeting for the Initial Scholars Program lasting approximately 60 minutes, and two 45-minute ERA Learning Sessions. All opportunities to observe the Alpine staff interacting with peers,

students, ERA leaders, and Alpine leadership were introduced to the researcher and scheduled through the Director of Research. In each observation, the critic was introduced but remained as an ‘outsider’ to the interaction, not engaging with Alpine staff besides being present throughout the event (Best & Kahn, 2006). The purpose of the observation was known to the Alpine staff, as the critic looked for evidence of CTE and elements of previously completed ESI passion projects. Field notes were coded and interpreted after the onsite visit with provisional coding (Saldaña, 2013) using Donohoo et al.’s (2020) factors of enabling collective teacher efficacy as the predetermined list of codes, specifically supportive leadership, cohesive teacher knowledge, goal consensus, embedded reflective practices, and empowered teachers (Anderson et al., 2023; Donohoo et al., 2020).

### ***Artifact Collection***

Collected artifacts consisted of the slides from one ERA Learning Session, 110 publications from ERA, and student work associated with passion projects. The collected documents were coded and interpreted after the onsite visit with provisional coding (Saldaña, 2013) using Donohoo et al.’s (2020) factors of enabling collective teacher efficacy as the predetermined list of codes, specifically supportive leadership, cohesive teacher knowledge, goal consensus, embedded reflective practices, and empowered teachers (Anderson et al., 2023; Donohoo et al., 2020).

### **Validity**

To address the credibility of this research process, structural corroboration and referential adequacy, as described by Eisner (2002) and Uhrmacher et al. (2016), were woven into all four dimensions: description, interpretation, evaluation, and thematics. Structural corroboration is “the presence of a coherent, persuasive whole picture” (Uhrmacher et al., 2016, p. 1419) and,



similar to triangulation, multiple data types were needed to cross-check and create a holistic interpretation (Merriam & Tisdell, 2016). Referential adequacy suggests the importance of “illuminating the subject matter and bringing about more complex and sensitive human perception and understanding” (Creswell, 2013, p. 246) by answering the question posed by Uhrmacher et al., “Does the critic’s work indeed allow the audience to see education in a new way and for purposes deemed important?” (p. 1419). Embedding thick descriptions, direct quotations, and sensory recounting to reveal subtleties and nuances of the culture and educative experiences helped educate the reader about the critic's perception (Eisner, 2002; Merriam & Tisdell, 2016). To ensure aspects of the situation are not neglected, the critic conducted critical reflexivity around the “instructional arc” framework to “explain their biases, dispositions, and assumptions” (Merriam & Tisdell, 2016, p. 249). Critical reflexivity provides clarification, allowing the reader to better understand how the critic arrived at the particular interpretation and strengthened the referential adequacy (Merriam & Tisdell, 2016).

### **Transferability**

This research explored the Alpine International School's ESI and its influence on CTE. As CTE has been explicitly connected to impacting student achievement, this study's findings hold significance for multiple stakeholders in education. The findings are meaningful to teachers and school leaders interested in innovative professional development. By examining AIS's ESI and its impact on CTE, this research offered insights into effective strategies for fostering teacher growth and collaboration. Educators looking to enhance their PL programs find this research valuable in understanding how such programs can positively influence collective teacher efficacy, ultimately leading to improved student outcomes (Donohoo et al., 2020). This study contributed to the broader body of educational research by examining the practical relationship

between PL and CTE beyond the already identified theoretical relationship. It offers a unique case study of the ESI at AIS and its potential as a model for other institutions. An educational criticism involving a site visit, semi-structured interviews, a survey, artifact collection, and direct observations provided a comprehensive framework for studying the effectiveness of PL programs in other settings.

### **Delimitations and Limitations of the Study**

The methodology of this study included several important delimitations and limitations that need to be considered.

#### **Delimitations**

Delimitations included the framework in which ESI was developed, participants lived experiences at AIS, and CTE's reciprocal relationship with student achievement.

#### ***Exploring Scholars Initiative's Underlying Framework***

Any prior links between the ESI to collective teacher efficacy was unknown. The study was based on the assumption that the ESI at AIS was developed without a specific focus on the enabling factors of CTE. Notably, Donohoo et al. (2020) identified these enabling factors several years after the inception of ESI in 2014. Consequently, the ESI functioned as a school characteristic that influenced CTE at AIS without deliberately intending to do so.

#### ***Lived Experiences***

The lived experiences of staff at AIS were the focus. This study recognized that incoming staff members at Alpine International School might have had preconceived perceptions of the school's enabling factors for CTE. Alpine was renowned for the opportunities it offers to both students and teachers, and prospective educators might have already possessed certain expectations and beliefs about CTE within the Alpine community. While these preconceived

notions could significantly influence their experiences and perceptions, this study delimited its scope to focus on educators' actual experiences and perceptions once they are part of the Alpine community rather than exploring their initial expectations. This delimitation ensured the research remains centered on the lived experiences and realities of Alpine educators regarding CTE rather than solely on their anticipations.

### ***Student Achievement***

Student achievement can affect CTE. This study acknowledged that many AIS students already demonstrated high achievement levels. It is essential to recognize this high-achieving student body might have naturally contributed to positive CTE among educators, potentially independent of or beyond the enabling factors identified to foster CTE. Therefore, this study delimited its scope to concentrate on the impact of AIS's ESI rather than attempting to disentangle the potential CTE effects stemming from the students' high achievement levels alone. By doing so, the research ensured a focused exploration of how AIS's intentional efforts for innovative PL contribute to CTE instead of conflating the inherent characteristics of the student body with the enabling factors of CTE.

### **Limitations**

Limitations included the unique community aspects at a boarding school including time spent together as a staff and further control of student life outside of the classroom, methods of assessing overall student achievement, length of the onsite visit, and researcher bias.

### ***Expatriate Community***

Participants work and live in a closely-knit expatriate community. This characteristic created a significant limitation to this study as this unique environment may have led to interactions outside regular work hours and perceptions of peers that differ from those in

American public schools. Not only did this affect the peer perceptions of participants, but Alpine staff also had control over students' home life and community during the school year. This distinctive living arrangement may have impacted collective teacher efficacy differently compared to a public-school study, which does not have control over students' home life and community during the school year.

### ***Measuring Student Achievement***

Measuring student achievement at Alpine International School appeared to focus on International Baccalaureate scores and matriculation, which does not measure every student's achievement. The study did not delve into the specific methods employed by Alpine staff to measure student achievement. Given that collective teacher efficacy reflects teachers' perceptions of their collective capacity to facilitate students' academic growth, variation in how student achievement is assessed at AIS compared to American public schools may have introduced potential confounding factors.

### ***Duration of Study***

The short duration of the onsite visit created limitations in data collection. This time constraint restricted the depth and variety of data gathered, particularly regarding the comprehensive process undergone by Exploring Scholars and their interactions with other Alpine staff, which needed to be fully captured. Consequently, specific intentions, experiences, and insights may have been overlooked during the two-week visit.

### ***Bias***

Conscious and unconscious bias may have altered the critic's perspective. The researcher acknowledged having accumulated eight years of professional experience at an American public school with various educational roles, including International Baccalaureate teacher and

administrator. These experiences could have introduced conscious and unconscious biases stemming from extensive workplace engagements, such as curriculum development, instructional leadership, and involvement in professional development initiatives. These biases might have influenced the interpretation and analysis of the AIS context.

### **Summary**

This research delved into the relationship between Alpine International School's Exploring Scholars Initiative and Collective Teacher Efficacy. It was centered on the experiences of Alpine staff and how these experiences correlated with their perceptions of CTE. A qualitative approach was employed to conduct this comprehensive investigation utilizing Eisner's educational connoisseurship and criticism. The research encompassed a broad spectrum of participants employed by AIS including educators, administrators, and ERA leaders.

The data were meticulously collected through various channels during an on-site visit as seen in Table 5. Data collection methods included a survey comprised of the Collective Efficacy Survey (Goddard et al., 2000), the Collective Teacher Beliefs Scale (Tschannen-Moran & Barr, 2004), and the Enabling Conditions for Collective Efficacy Scale (Donohoo et al., 2020), semi-structured interviews, collected artifacts, and direct observations. Quantitative data analysis was conducted to measure the level of CTE (Goddard et al., 2000; Tschannen-Moran & Barr, 2004) along with how present the proximate sources of CTE are at AIS, inside and outside of the ESI (Donohoo et al., 2020). Qualitative data, which encompassed a diverse range of sources such as artifacts, field notes, and transcripts of interviews, were subjected to thorough coding and analysis. Educational criticism played a pivotal role in the research process, revealing the essence of the participants' perspectives within their unique context (Eisner, 2017). The study ensured its validity through consensual validation, structural corroboration, and referential

adequacy, guaranteeing the credibility of the findings (Merriam & Tisdell, 2016). The study considered the potential influence of biases that could arise from the researcher's prior experiences and conducted critical reflexivity to enhance the research's referential adequacy (Merriam & Tisdell, 2016).

The implications of this research extend beyond AIS. It offers insights into enhancing teacher development and fostering collective teacher efficacy, which can be valuable to educators and educational leaders looking to enhance professional development initiatives and, ultimately, improve student outcomes. The study contributed to the broader field of educational research by focusing on the practical relationship between PL and CTE, shedding light on a unique case study like AIS's ESI and its potential as a model for other institutions.

**Table 5***Research Questions and Data Collection Processes*

Theoretical/ Conceptual Framework	Research Questions	Participants	Data Collection Tools and Sources	Data Analysis Procedures
Instructional Arc	1: How do teachers' experiences with the Exploring Scholars Initiative relate to AIS's measure of collective teacher efficacy?	<ul style="list-style-type: none"> <li>● Director of Research at ERA</li> <li>● Four AIS administrators</li> <li>● All AIS educators</li> </ul>	<ul style="list-style-type: none"> <li>● Semi-structured Interviews</li> <li>● Artifacts               <ul style="list-style-type: none"> <li>○ Emails</li> <li>○ Flyers</li> <li>○ Presentations</li> <li>○ Applications</li> <li>○ Student Work</li> <li>○ Classroom Tools</li> <li>○ PL Tools</li> <li>○ Publications</li> </ul> </li> <li>● Survey</li> <li>● Observational fieldnotes</li> </ul>	<p>Provisional coding using factors of collective teacher efficacy</p> <p>Determining the mean, t-tests were used to compare two subgroups, and z-score was used to compare two populations.</p>
Instructional Arc	2: How does the Exploring Scholars Initiative support the five factors related to fostering collective teacher efficacy: empowered teachers, embedded reflective practices, cohesive teacher knowledge, goal consensus, and supportive leadership?	<ul style="list-style-type: none"> <li>● Director of Research at ERA</li> <li>● Four AIS administrators</li> <li>● All AIS educators</li> </ul>	<ul style="list-style-type: none"> <li>● Semi-structured Interviews</li> <li>● Artifacts               <ul style="list-style-type: none"> <li>○ Emails</li> <li>○ Flyers</li> <li>○ Presentations</li> <li>○ Applications</li> <li>○ Student Work</li> <li>○ Classroom Tools</li> <li>○ PL Tools</li> <li>○ Publications</li> </ul> </li> <li>● Observational fieldnotes</li> </ul>	<p>Provisional coding using factors of collective teacher efficacy</p>

## CHAPTER IV

### DESCRIPTIONS OF EXPERIENCING PROFESSIONAL LEARNING

Embraced by the Alpine forest on one side, bathed in the crisp mountain air, and unceasing sunshine on the other, the Blanc campus is secured to the side of a steep mountain face, providing a solid foothold for the educational institution. Its white stone facade, adorned with hundreds of shining windows, is a vivid model of modern amenities and nature working harmoniously to create a meaningful environment for students to thrive.

Against this Alpine backdrop, the ‘lower campus’ emerges as a haven of learning, where each window seems to capture a snippet of the breathtaking scenery. Amidst this natural symphony, modern touches are subtle nods to the school's dynamic ethos. Bold red accents punctuate the facade, injecting vibrancy into the serene landscape. The school's name and logo, backlit against the exterior, become beacons of identity, subtly signaling the institution's pride in the service it provides. The entrance, encased in glass, serves as a gateway between nature and academia, inviting students, families, and staff with a professional calm. Upon crossing the threshold, an immediate ascent ushers visitors toward a sanctuary steeped in knowledge and history.

Ascending the stairs, the threshold opens into a path paved with red-carpeted luxury. The air carries a sense of reverence as memorabilia from the school's storied past covers the walls, narrating the journey that led to the present. The scarlet pathway unfolds, leading to a silent door that slides open, unveiling the inner sanctum of the school's administrative hub. Beyond this door lies a realm of significance: administrative offices pulsating with the rhythm of recruitment



strategies, financial stewardship, and the leadership mantle held by the Head of School. The plush carpet underfoot absorbs the sound of footsteps, creating a hushed atmosphere where the only audible cadence is the melodic hum of voices engaged in deliberations that shape the destinies of over 300 students and guide the endeavors of 100+ dedicated staff members.

Perched above the administrative offices, the dorms provide a secure haven for students. Below, classrooms, offices, and the bustling cafeteria all foster an atmosphere of scholarly pursuit and communal warmth. As you descend the stairs, all of your senses are enveloped by the living and learning environment of AIS.

Vivid canvases adorned with the strokes of creativity from current and past students line the walls. Each painting, a testament to the school's vibrant spirit, captures the essence of the surrounding countryside and the kaleidoscope of activities that define the students' lives. The walls breathe with a gallery of narratives, weaving an immediate sense of comfort and wonder. TV screens strategically positioned become dynamic portals of information, a continuous loop serving as an informational lifeline for students and teachers alike. These digital canvases not only advertise upcoming events but also share crucial information for student success and celebrate the achievements of both students and staff.

As the journey progresses toward the cafeteria, the soundscape transforms. The clinking of plates and glasses harmonizes with the music carefully selected by the kitchen staff, creating an inviting symphony that permeates the air. It is not just a space for culinary affairs but a communal hub where students, teachers, administrators, staff members, and immediate family converge. Amidst the conviviality, the cafeteria becomes a stage where conversations flow and laughter echoes. The setting is framed by expansive windows that unveil the picturesque mountain scape, allowing the natural beauty to become an integral part of the dining experience.

Plants, thriving on trellises, lend a touch of natural privacy, enhancing the sense of connection and camaraderie that fills the air. Here, embracing art, human connection, and culinary delights, the cafeteria becomes more than a space—it transforms into a canvas where community, culture, and nature converge in a rich tapestry of shared experiences.

### **Introduction**

In this chapter, two dimensions of educational connoisseurship, description and interpretations create a dynamic story of observations and experiences lived amongst the teachers. The description provides two purposes: providing the groundwork for constructing interpretations and offering a contextual framework for the audience. (Uhrmacher et al., 2016). According to Eisner (2002), “The descriptive aspect of educational criticism is essentially an attempt to identify and characterize, portray, or rend in language the relevant qualities of education life” (p. 226).

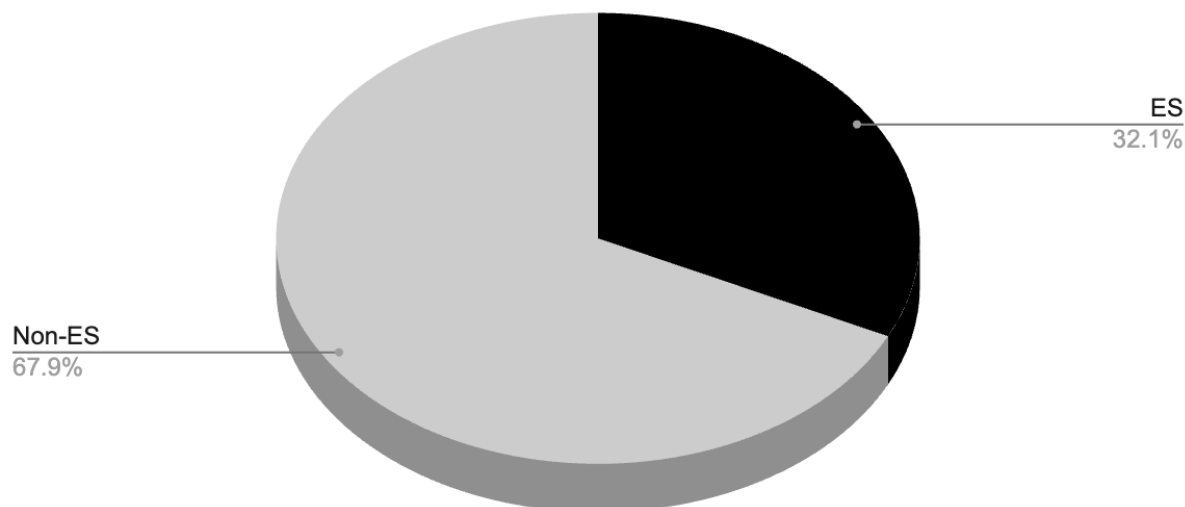
At the end of the previous school year, Alpine educators submitted applications for the Exploring Scholars Initiative through an online platform. After a thorough review process, nine faculty members were selected as Exploring Scholars for the upcoming school year. With seven successful proposals addressing various educational issues, these scholars receive ongoing support and guidance from the ERA leaders and a stipend to honor their time. During the first all-staff meeting, the Head of School formally introduced the current Exploring Scholars during the State of the School address, receiving recognition for the learning journey on which they were about to embark. To further enhance awareness and engagement from all Alpine staff and students, informational flyers were posted across the campus, providing a visual representation of the scholars and highlighting the educational topics they would explore throughout the academic year. This strategic marketing aimed to create a platform for Exploring Scholars to

actively participate in various activities, including visiting other classes, gathering teacher input through online surveys, and generating excitement for their culminating presentations scheduled toward the end of the school year.

Within ERA, the current Exploring Scholars and their mentors kicked off the academic year with a warm and welcoming apero, fostering informal discussions around their ideas and future learning. During this gathering, they established connections with ERA leaders and mutually select future dates for one-on-one meetings, along with a future date for an informal presentation outlining their learning trajectory for the school year. The three check-in meetings served as brief and constructive sessions where ERA leaders inquired about the progress of the Exploring Scholar's learning journey, creating space for reflection and collaborative planning for the next steps. The presentations represented significant milestones for the Exploring Scholars, offering them an opportunity to share their learning experiences with the Alpine staff through visual and oral means, utilizing posters and presentations. All Alpine staff members were warmly invited to attend each ERA Learning Session, scheduled after regular school hours, for convenient access to the event. These presentations aimed to help Exploring Scholars consolidate and reflect on acquired knowledge, share new insights, and assist Alpine staff in relating the information to their teaching methods, thereby enhancing student engagement and growth. These nine educators also joined a large percentage of Alpine teachers foraging a path that connected research to practical implementation. As seen in Figure 2, 32.1% or 18 of the current 56 Alpine teachers had completed at least one Exploring Scholars project. However, the ESI was open to all educators at AIS, so six other current faculty members were working in dorms and libraries, running activities for academic and resident life, and leading through administration.

**Figure 2**

*Percentage of Current Teachers with Exploring Scholars Initiative Experience*



*Note.* ES = Exploring Scholar

Through a process of data analysis and interpretation, multiple vignettes, a standard method found in educational criticism, vividly depicted the stories of Exploring Scholars' experiences and AIS's level of CTE. The distinction between description and interpretation is a blurred line defined by the critic's objective (Eisner, 2002). Description presents an account, while interpretation explains by introducing concepts or structure to illuminate the meaning of descriptive data (Uhrmacher et al., 2016). More explicitly, interpretation involves applying concepts, using analyses and metaphors to highlight relationships, patterns, or reasons in events or situations, aiming to uncover meaning and provide a unique perspective (Uhrmacher et al., 2016). The vignettes were categorized based on provisional themes and analyzed through Uhrmacher et al.'s (2016) instructional arc, which explored three dimensions of the ESI curriculum: the intentional, the operational, and the received.

Additionally, vignettes framed the factors of collective teacher efficacy inside and outside the ES: common goals, empowered teachers, supportive leadership, cohesive teacher knowledge, and embedded reflective practices (Donohoo et al., 2020). Chapter V provides a detailed exploration of these themes and their evaluations and implications. To initiate the thematic analysis, Uhrmacher's (2016) three curriculum aspects are addressed for interpretation.

### **Intended Goals or Objectives**

To answer this question, school and program artifacts, observations, and semi-structured interviews were used to determine the intended curriculum for the Exploring Scholars Initiative. The intended curriculum, as defined by Eisner (2002) as "the planned course of study" (p. 32), focuses on the planned structures of the Resident Scholars Program. This study explored the intentions of the Alpine administration and ERA leaders regarding specific aspects of the program designed to guide the learning of Exploring Scholars. Semi-structured interviews were scheduled by the Alpine Director of Research and conducted by the researcher with administrators and ERA leaders using the Exploring Scholars interview questions (see Appendix B). Additionally, semi-structured interviews were conducted with teacher participants to capture their perceptions of the ESI and understand how they interpreted the program's intentions. A list of the interview participants is available in Table 6, which outlines the different experience levels with the Exploring Scholars Initiative. Utilizing artifacts and observations provided further insight into the school administration's intentions that shape the curriculum or learning experiences of the ESI (Eisner, 2002).

**Table 6***Interview Participants*

	<b>One Exploring Scholars Project</b>	<b>Multiple Exploring Scholars Project</b>	<b>No Exploring Scholars Project</b>
Aria	X		
Audrey			X
Cem			X
Christophe			X
Elis		X	
Enna	X		
Erin			X
Levi			X
Lynn		X	
Maddox			X
Maeve		X	
Myles	X		
Nakoa		X	
Neil	X		
Simon			X
Todd	X		
Yagna	X		

**Tangible Experiences**

The Exploring Scholar's experiences and learning journeys were comprehensively explored through an online survey, semi-structured interviews, artifacts, and observations. In semi-structured interviews with Alpine staff participants, the Exploring Scholars interview questions (see Appendix B) were designed to shed light on their experiences within the program,

prompting them to share insights into their past or ongoing engagement with passion projects. These interviews pushed beyond the scope of the Exploring Scholars Initiative, encompassing AIS's broader frameworks applicable to all educators. The questions aimed to uncover the lived experiences of Exploring Scholars while also exploring potential connections between the program and other avenues for professional development within AIS.

Through this comprehensive approach, the interviews sought to shed light on how AIS fostered collective teacher efficacy, touching upon all factors: empowered teachers, embedded reflective practices, shared goals, cohesive teacher knowledge, and supportive leadership. The data collection spanned two weeks, during which not all programs facilitating teachers' learning experiences were observed. Forthcoming vignettes highlight teacher experiences directly tied to the Exploring Scholars Initiative. The artifacts collected included project applications, flyers, ERA leader notes, classroom instruments, and multimedia creations. Collecting these artifacts from Exploring Scholars offered a comprehensive and nuanced understanding of their experiences within the program. Additionally, insights into Alpine staff's interactions with peers and students through other AIS programs were interwoven to offer a comprehensive portrayal of AIS structures fostering experiences connected to collective teacher efficacy.

### **Insights or Lessons Learned**

This question was addressed through an online survey, semi-structured interviews, direct observations, and artifact collection, all with the lens of what the Exploring Scholars took away from their participation in the program, specifically regarding collective teacher efficacy. Of the 56 Alpine educators, 20 completed an online survey adapted from existing scales CES-SF, CTBS, and EC-CTES (detailed in Chapter III). This collection of surveys measured the current state of collective teacher efficacy at AIS, focusing on the measurement differences between two

groups, Alpine educators who have participated in the ESI and Alpine educators who have not participated in ESI. Analyzing the survey responses provided insights into how experiences within the Exploring Scholars Initiative influenced collective teacher efficacy amongst Alpine staff. In semi-structured interviews with Alpine staff participants, the Exploring Scholars interview questions (see Appendix B) delved into various aspects of the program's outcomes. Again, these interviews went beyond the scope of the ESI, delving into AIS's overarching frameworks applicable to all educators. They aimed to uncover not only the experiences of Exploring Scholars but also how they grew and what they learned. The questions investigated potential connections between the ESI and other avenues for professional development within AIS, exploring various aspects that contribute to collective teacher efficacy: empowerment of teachers, integration of reflective practices, establishment of shared goals, promotion of cohesive teacher knowledge, and cultivation of supportive leadership. By observing educators who had completed the Exploring Scholars Initiative, along with educators who had not, in various contexts such as classroom instruction, collaboration meetings, ERA Learning Sessions, and professional learning programs, differences were noted in their teaching practices, attitudes, and levels of engagement. Collecting artifacts such as published work from ERA, presentations, student work, or any other tangible outputs created in line with Exploring Scholars' growth allowed the researcher to trace learning paths, identify areas of growth, and evaluate the program's effectiveness in fostering professional development.

### **Research Question One**

Q1 How do AIS teachers' experiences with the Exploring Scholars Initiative relate to their measure of collective teacher efficacy?

To provide a foundation on the collective teacher efficacy at AIS, a digital survey named Teachers' Collective Efficacy Scale (see Appendix C) was developed, incorporating three



established and reliable surveys: the Collective Efficacy Scale Short Form by Goddard (2002), Collective Teacher Beliefs by Tschannen-Moran and Barr (2004), and Enabling Conditions for Collective Teacher Efficacy Survey by Donohoo et al. (2020). The research director received a digital copy via email and distributed the survey to all Alpine educators using their AIS email accounts. This email requested educators to complete the survey within the next 10 days. Twenty scales, representing approximately 36% of Alpine educators instructing at least one class, were successfully completed and submitted.

All 20 participants completed the Demographics section of the Teachers' Collective Efficacy Scale (see Table 7). In response to a question about racial and ethnic identity, 17 participants identified as White, three as Asian, and one chose the option "Prefer not to answer." Keep in mind that AIS is an international school; thus, the country of origin for each racial and ethnic identity was from around the world. Regarding years of experience in education, participants provided the following distribution: seven had 11 to 15 years, six had 21 to 25 years, two had six to 10 years, two had 16 to 20 years, two had 26 or more years, and one had one to five years.

Participants divulged their involvement in the Exploring Scholars Initiative, with 11 indicating they had participated at some point. In contrast, nine participants had never participated in the Exploring Scholars Initiative. Each scale was scored according to the author's guidelines. Descriptive statistics quantitatively analyzed the distribution of key variables in the CTE scores for each survey and subscale. The outcomes, as detailed in Table 8, served as an additional layer of evidence to enrich the qualitative findings. The answers from the teachers who had or were currently in the Exploring Scholars Initiative were compared to teachers who

have never been involved in the Exploring Scholars Initiative through unpaired *t*-tests in Table 8. The significance threshold was set at .05.

**Table 7**

*Participant Descriptive Statistics of the Teachers' Collective Efficacy Scale*

Demographic	<i>n</i>
Gender	19
Male	10
Female	9
Participation in Exploring Scholars	20
No	9
Yes	11
Racial and Ethnic Identity	19
Asian	2
White	17
Prefer Not to Say	1
Highest Level of Education	20
College Degree	1
Master's Degree	17
PhD or EdD	1
Other	1
Years Experience in Education	20
1-5	1
6-10	2
11-15	7
16-20	2
21-25	6
26+	2

**Table 8***Comparing Collective Efficacy Scales*

	<i>M</i>	<i>t</i>	df	Sig (2-tailed)
CE-S	4.01			
Non-Exploring Scholars	3.88	0.9261	18	0.3667
Exploring Scholars	4.12			
CE-S   Competence	4.17			
Non-Exploring Scholars	3.98	2.3783	18	0.0287*
Exploring Scholars	4.32			
CE-S   Task	3.86			
Non-Exploring Scholars	3.78	0.3893	18	0.7016
Exploring Scholars	3.92			
CTBS	7.20			
Non-Exploring Scholars	6.90	1.9505	18	0.0669
Exploring Scholars	7.45			
CTBS   Instructional	7.48			
Non-Exploring Scholars	7.31	3.7133	18	0.0016*
Exploring Scholars	7.62			
CTBS   Discipline	6.93			
Non-Exploring Scholars	6.48	2.1717	18	0.0435*
Exploring Scholars	7.29			
EC-CTES	3.41			
Non-Exploring Scholars	3.27	1.4924	18	0.1529
Exploring Scholars	3.53			
EC-CTES   Empowered	3.08			
Non-Exploring Scholars	3.00	0.7202	18	0.4807
Exploring Scholars	3.14			
EC-CTES   Cohesive	3.23			
Non-Exploring Scholars	3.06	4.0176	18	0.0008*
Exploring Scholars	3.36			
EC-CTES   Goals	3.53			
Non-Exploring Scholars	3.36	2.7299	18	0.0137*
Exploring Scholars	3.66			
EC-CTES   Supportive	3.34			
Non-Exploring Scholars	3.06	6.1050	18	0.0001*
Exploring Scholars	3.57			
EC-CTES   Embedded	3.90			
Non-Exploring Scholars	3.86	0.6112	18	0.5487
Exploring Scholars	3.93			

\* $p < 0.05$

### Collective Efficacy Scale Short Form

Goddard's (2002) Collective Efficacy Scale Short Form (CE-S) consists of 12 items evenly distributed across two subscales—task complexity and group teaching competence—addressing teachers' perceptions of challenges, opportunities, and group teaching capabilities, rated on a 6-point scale, described in Chapter III with more explicit detail. A digital version of the CE-S was the first section of the Teachers' Collective Efficacy Scale (see Appendix C). Using Hoy et al.'s (2002) scoring key cited by Burke (2014), the teacher's responses were scored by:

1. Reversing scores on items 4, 5, 8, 10, 11, and 12.
2. Computing the average items score for each of the 12 items.
3. Summing the average items' scores for all 12 items and dividing by 12 (Burke, 2014, p. 98).

The resulting CE score for AIS was 4.01. The Z-scores compared AIS's CTE scores to the representative Ohio sample (Goddard, 2002, as cited by Burke, 2014). The AIS CTE rating from the sample teachers was 4.01,  $z = -0.17$ . This z-score indicated the CTE score for AIS was below the sample average, specifically in the 43rd percentile, which was unexpected.

Teachers who participated in the ESI scored AIS's collective teacher efficacy higher ( $M = 4.12$ ,  $z = 0.00$ ), aligning with the average sample data score. Teachers who had not participated in the ESI scored AIS's collective teacher efficacy low ( $M = 3.88$ ,  $z = -0.38$ ), well below the sample average, specifically in the 35th percentile. Despite AIS having an average to low collective teacher efficacy, there was a difference in how the two groups viewed the school. A two-sample t-test compared Exploring Scholars ( $M = 4.12$ ,  $SD = 0.53$ ) and Non-Exploring

Scholars ( $M = 3.88$ ,  $SD = 0.63$ );  $t(18) = 0.9261$ ,  $p = .3667$ , revealing a difference in their perceptions.

Exploring Scholars perceived the collective teacher efficacy at AIS as higher than Non-Exploring Scholars' perception, but the difference was not statistically significant. The average for Non-Exploring Scholars and Exploring Scholars on each question is provided in Figure 3 to discern the differences in each group's perceptions for each question. The error bars were determined by calculating the midrange, or the mean of the highest and lowest values,  $(\text{Max} + \text{Min}) / 2$ , to depict the range of the Likert scale responses to each question.

The Exploring Scholars exhibited a statistically significant difference ( $p = 0.0287$ ) in their opinions on Group Teaching Competence compared to Non-Exploring Scholars (Goddard, 2002). Past and current Exploring Scholars illuminated the distinction. They emphasized the collaborative and positive culture on campus, where educators engaged in meaningful discussions about teaching and learning, which fostered a highly professional environment.

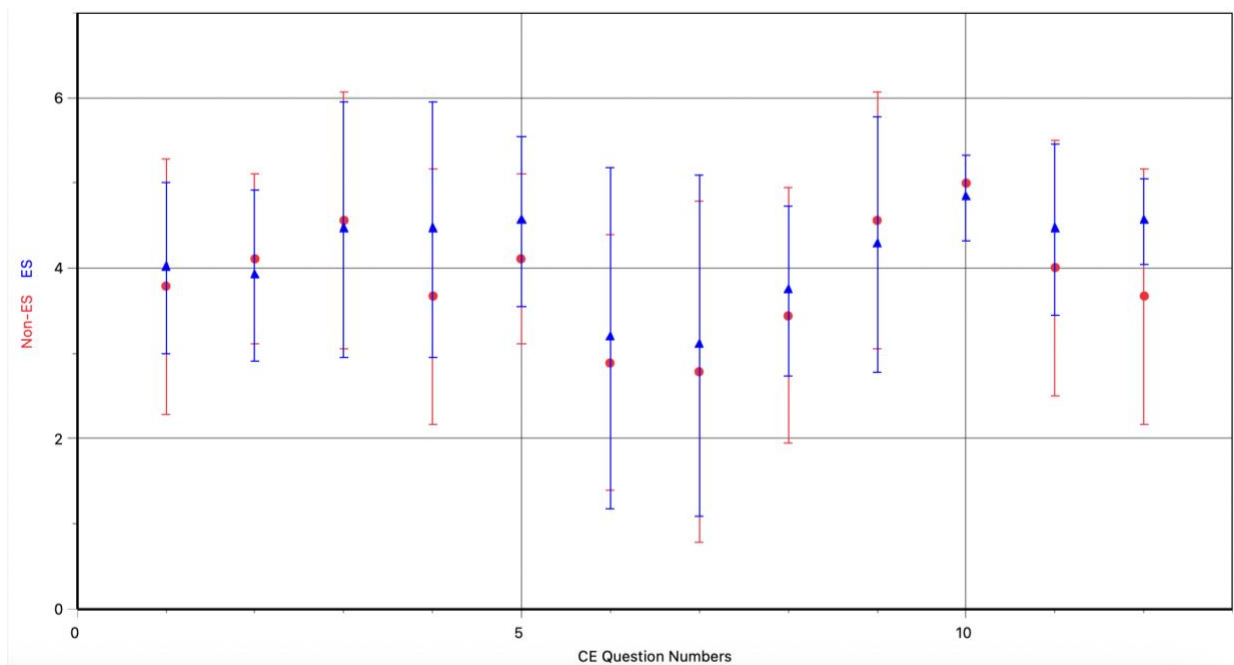
Todd lamented on the positive culture as a “rising tide of scholarship”:

The culture, it's a positive culture. When we sat down yesterday morning, without any senior leaders in the room, people were just doing the work, chatting about work. “Oh, you tried this? ... You tried that?” It's a highly professional environment. I haven't always worked in schools like that, so it's really nice. And it rubs off. I think it's just, it's a rising tide of scholarship.

Enna, even though primarily working on a different campus, shared similar sentiments: “I think that's what I really like about this campus especially. I feel like we're very collaborative, and if I feel like I'm doing a disservice to the kids, there's always somebody that [you] can kind of talk it out with and maybe make a new plan or something.”

**Figure 3**

*Comparing Collective Efficacy Scale Short Form Responses*



The teachers were the ones who fostered this environment, supporting everyone in the endeavor of teaching and learning. Maddox shared, “We have a lot of committed educators who really want to focus on teaching and learning, want to have those conversations about teaching and learning, want to improve.”

These testimonials suggested that Exploring Scholars perceived a stronger sense of collaboration and commitment among educators, potentially influencing their higher rating of Group Teaching Competence.

### **Collective Teacher Beliefs**

The survey's second section included the Collective Teacher Beliefs (CTBS), a 12-item tool Tschannen-Moran and Barr (2004) developed to assess collective teacher efficacy, measuring shared belief in faculty about their capacity to impact student achievement. Teachers

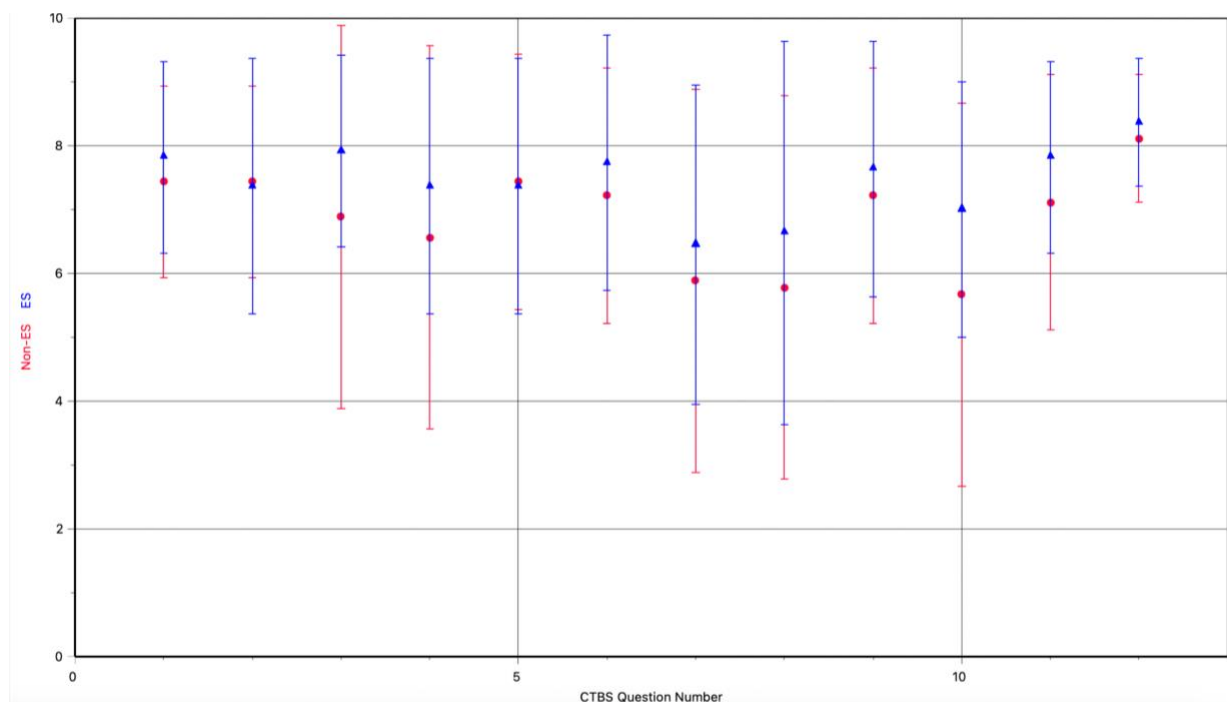
recorded their responses on a 9-point Likert scale. Subsequently, CTE scores were computed by averaging the values of the 12 items.

The average for Non-Exploring Scholars' and Exploring Scholars on each question on the CTBS is provided in Figure 4 to discern the differences in each group's perceptions for each question. The error bars were determined by calculating the midrange, or the mean of the highest and lowest values,  $(\text{Max} + \text{Min}) / 2$ , to depict the range of the Lickert scale responses to each question. The descriptive statistical analysis in Table 8 indicated the overall spread of CTE at AIS as measured by CTBS.

To further determine the relationship between ESI and CTE, three distinct groups were identified and compared statistically across all questions on CTBS, then across the two subscales: All Alpine Teachers, Exploring Scholars (individuals currently in or have completed the program), and Non-Exploring Scholars (those not participating in the program) as was seen in Table 8. Both subscales, Instructional Strategies ( $p = 0.0016$ ) and Student Discipline ( $p = 0.0435$ ), were statistically significant when comparing the Exploring Scholars to Non-Exploring Scholars, indicating the higher scores from Exploring Scholars were not by chance.

**Figure 4**

*Comparing Collective Teacher Beliefs Survey Results*



## **Instructional Strategies**

The Exploring Scholars Initiative serves as a catalyst for broadening teachers' perspectives on instructional strategies by providing a spark of inspiration or an opportunity to implement best practices and challenge traditional teaching methods.

Yagna expressed how observing a colleague's project on executive skills sparked a new interest, emphasizing the program's impact in expanding thinking beyond conventional content areas:

I've always been working on areas around my content, but I've never thought of something that could go beyond my content. When I see my other colleagues do different projects, especially one of my colleagues, who's doing something on executive skills, it is very interesting. When she said 'executive functions and executive skills,' I'm so used to



thinking of it from the corporate language. To think of it in an academic setup for students is very fascinating. So, watching her particular project and where it is going has really given me more thirst to read in those areas and develop. I think that's the overall impact. It doesn't have to be massive, but I think even one little spark of inspiration, either in terms of reading in that area or trying something in the class. I think that's one of the success points of this particular program.

Elis highlighted the program's role in addressing the gap between knowing best practices and implementing them in the classroom, emphasizing the opportunity it provides to experience more self-directed learning and challenge traditional teaching methods.

As teachers, I feel like we're really good about talking about what best practices are and knowing what best practices are and then still like having a classroom where the kids are all in rows, and we stand up there and show power points slides [laughing] and tell them information that they need to know to perform on a test, right? There's a lapse in terms of what we know is best practice and what we do. I feel like the [Exploring Scholars Initiative] is an opportunity not just to pursue your passion and learn about a particular topic as part of your professional development but also to experience what a more self-directed learning experience would feel like. I think both of those things are really valuable because, again, many people, almost all of us, who have successfully become teachers are products of a system that is antiquated.

These thoughts underscored the transformative impact of the ESI on teachers' approaches to instruction.

## **Student Discipline**

While the statistical analysis revealed that student discipline significantly differed between the Exploring Scholars and Non-Exploring Scholars responses, intriguingly, this aspect was not corroborated by direct observations during school events, discernible artifacts, or mentioned in interviews with staff members. Despite its statistical weight, the absence of tangible evidence or firsthand accounts raises questions about the actual prevalence or interpretation of disciplinary issues within the school environment. These questions could be an avenue for future research.

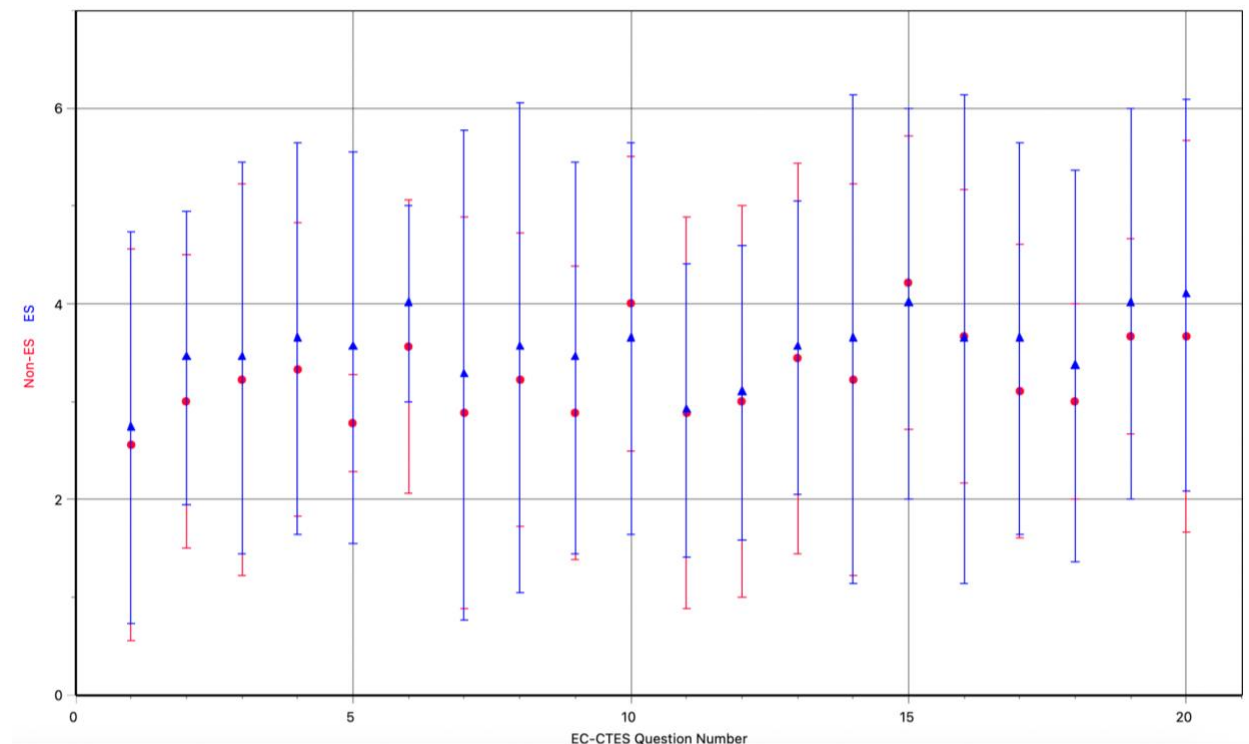
## **Enabling Conditions for Collective Teacher Efficacy**

The digital survey's final section included the Enabling Conditions for Collective Teacher Efficacy Scale (EC-CTES) developed by Donohoo et al. (2020). Utilizing a 6-point scale, the 20-item questionnaire assessed five subscales related to school variables supporting CTE: supportive leadership, empowered teachers, embedded reflective practices, cohesive teacher knowledge, and goal consensus. The average for Non-Exploring Scholars' and Exploring Scholars on each question on the EC-CTES is provided in Figure 5 to discern the differences in each group's perceptions for each question. The error bars were determined by calculating the midrange, or the mean of the highest and lowest values,  $(\text{Max} + \text{Min}) / 2$ , to depict the range of the Lickert scale responses to each question. Descriptive statistics in Table 7 illustrated the overall spread of CTE at AIS measured by EC-CTES. In contrast, further analysis in Table 8 compared three groups—all Alpine educators, Exploring Scholars (current or completed program participants), and Non-Exploring Scholars—across all EC-CTES questions and its five subscales. When calculating teacher perceptions on the subscales, a difference was found in three subscales, Cohesive Teacher Knowledge ( $p = .008$ ), Common Goals ( $p = .0137$ ), and Supportive

Leadership ( $p = .0001$ ). These differences were statistically significant, indicating the higher scores from Resident Scholars were not random.

**Figure 5**

*Comparing Enabling Conditions for Collective Teacher Efficacy Scale Results*



### **Cohesive Teacher Knowledge**

As it relates to the Exploring Scholars Initiative, cohesive teacher knowledge is characterized by a dynamic and collaborative learning culture focusing on disseminating innovative educational practices. The program is a stimulant for spreading effective teaching approaches and methodologies. As Audrey pointed out, school-wide practices stemmed from the Exploring Scholars Initiative:

Standards-based grading was a former [Alpine] teacher working in the middle school whose [Exploring Scholar] project was standards-based grading. That's an example of one [school-wide approach] that started very, very small. That was like Math 7 and 8, and eventually exploded across the whole school with professional development and a move towards standards-based grading [in all classes].

As more educators engaged in the ES by exploring initiatives tailored to their classrooms or specific needs, the professional learning program's influence expanded, becoming a pathway to cultivate a shared approach to knowledge-building. This pathway fosters a culture of continuous learning within the school community; as Levi highlighted, "The cohesiveness is a culture that learns, a school that learns." However, Levi also noted this approach was not universally established throughout the school: "I don't feel like there's a collective agreement on what cool things school can be, but there are nice pockets of people that do individual things while they're in charge or while they're here." While everyone might not prioritize innovative educational practices, they have become a cultural norm within the school, providing teachers with opportunities for diverse perspectives to be recognized and enabling them to make individual contributions to educational development.

### **Common Goals**

At Alpine International School, common goals were identified as the vision and mission visually depicted as a majestic mountain scene. A red flag, adorned with 'The [AIS] Values,' is waving in the wind atop the middle of three distinct peaks. These gray and snow-capped mountains symbolize the three core values: respect for the environment, respect for self and others, and respect through generosity.

These towering mountains stand rooted in a lush green valley, an allegorical representation of “Education with Impact,” where high-quality learning flourishes. The essence of impactful education at AIS is captured in the statement: “High-quality learning is achieved at [AIS] when students are valued, challenged, have ownership of their learning and passions, and can adeptly apply knowledge and skills across diverse contexts throughout their lives.” This lofty educational landscape is firmly grounded by a solid gray band, which carries the weight of Alpine's mission statement: “Developing innovative, compassionate, and responsible citizens of the world.” In this rich tapestry of symbolism, Alpine's commitment to fostering holistic, compassionate, and globally responsible individuals is vividly portrayed. This poster is located throughout the Blanc and Béraud Campuses, along with the hallways and entryways in every student dorm. Every interview participant referenced the mission statement, highlighting innovation, compassion, and responsibility as the goals for AIS. Christophe highlights how the ESI connects to the mission statement:

I think already the word innovative means that we always have to think creatively. And we also have to think differently. And it's a little bit that outside-the-box thinking. So I think the [Exploring Scholars Initiative] helps promote a more of a, let's look at things from a different angle. Let's learn, let's have a growth mindset.

### **Supportive Leadership**

Supportive leadership is just one facet of the leadership style within the Exploring Scholars Initiative. The Exploring Scholars characterized the leaders in ESI as highly supportive, responsive, and engaged. In his role as a leader, the director is described as consistently encouraging and facilitating the pursuit of individual interests. Myles emphasized the program's regular check-ins, where scholars are asked about their well-being and offered assistance: “I feel

like I'm very supported in [ERA]. They do the checkup on you and say, 'How are you doing? Do you need any help?'" The supportive nature of the ERA leaders was evident through the encouragement given to scholars to explore their areas of interest with a positive and affirming attitude. Aria echoed Myles with a similar sentiment, emphasizing the director's immediate and enthusiastic support for her passion project ideas: "I find the director to be really supportive. Pretty much anything that I've been interested in, he's like, 'That sounds amazing, go for it.' He's always, if I've needed anything from him, he's always been very responsive and very, yeah, like just really engaged." The director's supportive nature reached beyond the ES, as they influenced all systematic and sustained professional development at AIS. Neil shared the following opinion: "The director has always been supportive, even when I wasn't in the [Exploring Scholars Initiative]."

Teachers' experiences with the ESI at AIS demonstrated a meaningful relationship with AIS's measure of collective teacher efficacy. Participation in the program correlated with higher scores in various aspects of collective teacher efficacy such as group competence, instructional strategies, student discipline, cohesive teacher knowledge, common goals, and supportive leadership. Through both quantitative analyses utilizing the Teachers' Collective Efficacy Scale and qualitative insights from interviews with Alpine educators, Alpine administrators, and ERA leaders, it became evident that the ESI fosters a culture of continuous learning, collaboration, and a shared belief in the Alpine staff's capacity to impact student achievement. This alignment between the experiences gained from the ESI and AIS's measure of collective teacher efficacy underscored the program's effectiveness in enhancing educators' confidence and effectiveness in their teaching practices, thereby contributing to the overall educational excellence of AIS.

## **Research Question Two**

- Q2 How does the Exploring Scholars Initiative support the five factors related to fostering collective teacher efficacy: empowered teachers, embedded reflective practices, cohesive teacher knowledge, goal consensus, and supportive leadership?

Utilizing provisional coding, recurring themes in semi-structured interviews with Alpine staff were identified to explore the impact of the ESI. These provisional codes aligned with the five enabling factors of collective teacher efficacy: empowered teachers, embedded reflective practices, cohesive teacher knowledge, goal consensus, and supportive leadership. Exploring these themes involves comparing the recurring patterns identified through provisional codes, observations, and artifacts to discover areas of convergence that illuminate the program's influence. When investigating the impact ESI had on the development of CTE, it became evident that the program serves as one component within a broader framework of structures and systems to address the enabling factors. Each key factor was thoroughly investigated to comprehensively understand the Exploring Scholars' experiences and the program's contribution. This comprehensive exploration entails presenting rich descriptions and interpretations of the experiences of Exploring Scholars derived from interviews, observations, and artifacts, including vignettes to provide a nuanced—understanding of how the Exploring Scholars Initiative augments the existing culture at AIS.

### **Goal Consensus**

We now accept the fact that learning is a lifelong process of keeping abreast of change. And the most pressing task is to teach people how to learn.

—Peter Drucker

Goal consensus is a vital element within a school, fostering a shared dedication to common objectives, enhancing mutual commitment, promoting collaborative efforts, and enabling educators to track progress, ultimately reinforcing their collective efficacy and effective

collaboration to achieve shared goals (Bryk & Schneider, 2002; Donohoo et al., 2020; Goddard et al., 2007; Kruse & Louis, 1995; Tschannen-Moran & Barr, 2004). Educators at AIS understood the need for a clear goal consensus. Elis shared,

It's just sort of like clarity of mission and vision. I think when you have that, then you're sending a strong message about, like what your culture is and who you are organizationally. You're setting your teachers up for success first of all before they even come in the door.

To delve deep into the ESI's contribution to AIS's goal consensus with participants, the interview questions (see Appendix B) explored both the goals of the Exploring Scholars Initiative and Alpine International School.

### **Layers of Goals at Alpine International School**

The goal of Alpine International School was clearly articulated in its mission to develop “innovative, compassionate, responsible citizens of the world,” as stated by Christophe. This vision stemmed from the founders' aspiration to establish “an international high school” where students can achieve their aspirations and become genuine “citizens of the world,” as noted in the school's admission information. Maddox echoed this sentiment, emphasizing the importance of the mission statement, which encompassed innovation, compassion, and responsibility. Additionally, Maeve highlighted the significance of the school's three pillars including whole-child education, innovation, and global family as integral components of its overarching goal. The range of participants' ability to quote the mission was wide. Audrey offered, “Well, I could parrot the mission for you,” while Levi admitted there was a mission statement with three pillars, but his lack of precise knowledge came from his actions: “it's because of my inattention that I don't know. There's plenty of opportunity for me to have seen that.” This collective effort



reflected AIS's commitment to cultivating individuals who can positively impact the global community. Todd reinforced this commitment by emphasizing the shared desire among educators to push students into new experiences: "I think we're all on the same boat. We all want the kids to get outside and out of their comfort zones." Neil's perspective provided insight into the collaborative process of setting goals at AIS, emphasizing the importance of consensus-building to ensure alignment with the school's overarching mission:

So we have a school goal, a department goal, and then we set our own goals. And so that department goal is determined through consensus in those department meetings. It's funny, like the school goal can be, but then sometimes people are annoyed with how slow a consensus process can be and be like, why are we in these meetings? And it's like, well, we're in these meetings to build consensus. And if we weren't building consensus, then you'd probably be criticizing that it's a top-down goal setting.

This collaborative approach fostered a sense of ownership and collective responsibility among staff members in pursuit of AIS's educational objectives.

As Neil pointed out, there are many layers to the goals at AIS. Several participants alluded to a yearly initiative as the school's goal. According to Myles, "Our goal is DEIJ (Diversity, Equity, Inclusion, and Justice)." Enna elaborated on how the school provided targeted PD to help get everyone on the same page: "I think our overall goal this year is to focus on inclusion, and that we've had very targeted PD on that over the last few months." This goal was a statement typed on Erin's yearly appraisal documents: "it's something about like incorporating better DEIJ units within your subject area that's the goal for this year." However, overall, it seemed the school was about developing children. Todd shared, "We're all, I mean, there's a high pastoral care requirement, right? You see a kid looks like they need some help, even if it's

outdoors or off-campus, and you step in. I think that's also the goal.” There are also structures to help students develop personal skills as they live on campus through the school year. Enna pointed out that there is a requirement to help students navigate dorm life effectively: “like making sure they put on their clean sheets every week, making sure they do their laundry and like, it's those little things.” As perceived by administrators and educators, the goals at AIS are multifaceted, ranging from yearly initiatives like DEIJ to overarching aims of inclusivity and student development. Despite varying interpretations, the overarching focus remained on nurturing students holistically, ensuring their well-being and academic and personal growth.

However, due to varying interpretations and layers, AIS's goal appeared to lack clarity to the staff, as highlighted by Erin's observation that the process of goal-setting often lacks follow-through: “it's never clear because they [administration] do this whole ‘let's make a goal together, let's make one’ and then they kind of let the ball drop as far as follow through.” Maeve echoed this sentiment, expressing frustration over the sporadic nature of initiatives such as diversity, equity, inclusion, and justice (DEIJ) efforts, which seemed to be isolated events rather than integrated into a cohesive long-term strategy: “we had one DEIJ thing, and it was so good and so empowering, and it was really just amazing. But then it was like, well, what do we do now? And it just felt like it was... one and done.” Elis suggested the school was experiencing an identity crisis, “working within a school that's like has a bit of an identity crisis,” indicating a lack of clarity in its overarching direction. The lack of consistency and follow-through in goal-setting processes, coupled with sporadic initiatives, reflected a broader challenge at AIS in defining a clear and cohesive direction, highlighting the need for a more unified and sustained approach to achieving its objectives.

## **Learning to Learn with Exploring Scholars**

Educational Research at Alpine identified the goal of the Exploring Scholars Initiative:

The goal of our [Exploring Scholars Initiative] is to provide support for creative and driven staff to explore educational issues in depth in our school context to enliven their experiences of professional development at [AIS] while enriching the academic environment for us all.

This goal aligned well with the goal identified by Alpine educators. Together, they identified the goal of the ESI as supporting educators in their continuous professional development, encouraging them to engage in lifelong learning, and contributing to the educational ecosystem by sharing findings and enhancing the overall learning environment. Neil referred to a quote the director always shared: “The director always uses this phrase, which I’ll probably misquote, but it’s becoming the professionals we already are.” Enna’s thoughts delved deeper into the ESI’s goals around teachers’ actions: “The goal of the [Exploring Scholars Initiative], I believe, is to give teachers the opportunity to find something that they’re interested in and, kind of, go with it and have some guidance around it.”

The ESI at AIS served as a platform to nurture and celebrate educators' ongoing professional development and engagement in informal action research, contributing to the enhancement of the educational ecosystem. Neil emphasized the importance of lifelong learning and how the program supported educators in sharing their experiences and findings with a broader audience, aligning with the school's commitment to continuous growth:

If lifelong learning is truly one of our cornerstones, then we need to live it. The [Exploring Scholars Initiative] helps us do that because it encourages and supports people to continue their professional development, present at conferences, and share their

findings and experiences with a broader audience, again contributing more to the educational ecosystem.

Levi underscored the PL program's focus on fostering an environment where faculty members actively engage in learning, “What matters is that they’re engaged in learning something to make an environment in which they learn to continue to be engaged in learning stuff,” emphasizing its role in promoting ongoing professional development. Maddox highlighted the PL program's goal of championing teachers' efforts in informal action research, providing recognition and appreciation for their dedication to improving educational practices, and ultimately enhancing the learning environment for teachers and students:

Teachers are always working hard. Teachers are always, I think, engaged in their own little mini-action research in some ways, even though it’s not as formalized or structured as, say, I’m going to try this, and I’m going to reflect and see if this works. And I think what the [Exploring Scholars Initiative] aims to do is a great idea, to kind of champion that a little bit. Identify some people who are wanting to do that work, you know, incentivize it a little bit in terms of compensation, or not even incentivize because I don’t think that’s why people do it, but to kind of appreciate the work.

In summary, the ESI at AIS was designed to support educators' continuous professional development, foster a culture of lifelong learning, and encourage engagement in informal action research to enrich the academic environment and contribute to the broader educational ecosystem.

### **Supporting the Vision and Mission**

The Exploring Scholars Initiative at Alpine International School aligned closely with the school's mission and vision by fostering innovation, promoting continuous learning, and

encouraging responsibility towards the environment and global citizenship. The ERA Exploring Scholars application (see Appendix D) included a Goal and Measurement section featuring three questions: “Mark the theme that your project will address,” “What NEASC Learning Principle(s) does your project best align with,” and “Impact this will have on students.” These questions indicated an expectation that the educator's chosen passion project aligned with themes recognized by the school, reflected aspirational goals for school growth, and aimed to positively impact student learning. Table 9 compares the 2023/2024 Exploring Scholars projects and Alpine's vision and mission, illustrating the alignment between educator-defined passion projects and the school's strategic objectives. Specific projects exhibited direct connections with Alpine's mission, evident in titles like *Book Values: Using the School Mission Statement to Inspire a Schoolwide Reading Project* and *Fostering Creativity and Critical Thinking in Makerspace/Innovation Lab*. These projects explicitly referenced the mission statement or incorporate its key themes.

Conversely, some projects demonstrated more subtle connections. For instance, *Learning Lit Lenses* involved students exploring literature through various perspectives to uncover underlying themes and ideas, fostering compassion. Similarly, *Embedding Executive Function Skills in the Classroom* aimed to integrate executive functioning skills across the curriculum, offering students an additional avenue to develop responsibility. The comparison highlighted how Exploring Scholar projects were intricately linked to Alpine's vision and mission, showcasing educators' commitment to advancing the school's overarching goals. This alignment ensured passion projects and educators' efforts contributed meaningfully to the school's strategic direction and objectives, thus exemplifying the concept of bounded autonomy. Within this bounded autonomy, though, educators still have a degree of freedom to pursue their creative

thought. Maddox highlights how the program allows teachers to contribute to research areas of interest, fostering innovation within the community:

I think it does push towards innovation because, again, it's an honoring of what teachers probably are already doing, but with time and money resources, I guess. And so it allows them to really stop and think and say, how could I work to contribute to this idea or this area of research that I'm particularly interested in? And how could that improve the community? So, I think that's innovative.

Neil highlighted the importance of remaining curious and agile, traits essential for responsible global citizenship. These traits are promoted in other factions of AIS, such as the Mountain Learning Hub, which supports Alpine educators in opening their classroom doors and after-school activities to the natural world around AIS, further encouraging students to become “instruments of change.” Neil identifies ESI as a program promoting the same traits among teachers and students.

There's the [Mountain Learning Hub], encouraging students to engage with the natural world and cultivate a relationship with the environment so that when they move on from here, they want to protect it and be responsible citizens. Part of being a responsible citizen of the world, which is a big phrase in our mission statement, is remaining curious and continuing to develop rather than, you know, rather than just being comfortable, right, [Laugh] and being staid. Your approaches are your understanding. I think we need to be agile. And so, the [Exploring Scholars Initiative] definitely promotes that among teachers and among the school. I think it definitely contributes to that.

Lynn underscores the program's role in modeling continuous learning for students, “it's great for students to see that in their teachers, to see them pursuing something that they're passionate

about, whether it's in the class or outside of the class.” She also elaborates on how the ESI fosters collaboration among staff, “it allows the staff to collaborate with other colleagues from around the world, depending on what their project is, so all colleagues within the school. So, it encourages that [collaboration].” Lastly, Lynn recognizes how the ESI encourages innovation and the responsibility to learn, which aligns with Alpine's mission and vision. Overall, the ESI embodies Alpine's commitment to fostering a dynamic learning environment that nurtures curiosity, innovation, and responsibility among its community members.

The ESI at AIS contributed to the development of collective teacher efficacy by fostering a shared dedication to creating an environment of continual learning and aligning with the school's mission and vision. Through goal consensus, educators at AIS were united in their commitment to common objectives, enhancing their collective efficacy and collaboration on all educator efforts. The PL program supported educators in their continuous professional development, encouraging lifelong learning and promoting engagement in informal action research, ultimately enriching the academic environment and contributing to the broader educational ecosystem. Additionally, the ESI was framed by the mission statement and aligned closely with Alpine's vision by fostering innovation, promoting continuous learning, and encouraging responsibility towards the environment and global citizenship among teachers and students.

**Table 9**

*Comparing Exploring Scholars Projects to Alpine's Vision and Mission*

Title of Project	Summary	Innovative	Compassionate	Responsible
Book Values: Using the School Mission Statement to Inspire a Schoolwide Reading Project	We are working on implementing a schoolwide reading project for next academic year using the school mission statement values- INNOVATIVE, COMPASSIONATE, RESPONSIBLE GLOBAL CITIZENS, as the theme for each term. We are selecting a community-sourced list of titles, embedding reading time and demonstrating a love of and the value of reading, and then celebrating the achievements of the community through their reading.	X	X	X
Embedding Executive Function Skills in the Classroom	Research evidence-based practices in the area of embedding and teaching executive functioning skills in the classroom. Collaborate with teachers in this area; conduct interviews and surveys in the classrooms based on EF Skills. Partake in workshops led by experts in the field and lead further PD to faculty to help embed language and strategies. EF Skills training to be provided to all students at the beginning of the year (both academic and dorm related).			X
Learning Lit Lenses	My question: How can I increase my efficacy with teaching and learning lit lenses, so all learners accurately apply them to texts, with growing sophistication? Method: get student voice/feedback (Padlet, interviews), apply and test, get more feedback, apply and test, etc.		X	
Math Videos for Flipped Classrooms and Tutoring Gaps	I want to make high-quality instructional math videos as a tool for flipped classrooms and to aid students who are unable to get tutoring due to high demand and low supply.		X	



Table 9 Continued

Title of Project	Summary	Innovative	Compassionate	Responsible
Fostering Creativity and Critical Thinking in Makerspace/Innovation Lab	The role of education in creativity and critical thinking is increasingly growing. As educators, we should foster "independent thinking" rather than just impart knowledge to children. The lack of teachers' implementation often stems from teachers' need for clarity about what creativity and critical thinking actually mean and entail in their daily teaching practices. This leaves teachers needing clarification on how these big concepts translate into teaching, learning, and formative assessment. The project's main objective is to demonstrate to education policymakers and Makerspace teachers what it means to teach, learn, and evaluate creativity and critical thinking in the Makerspace/Innovation Lab.	X		
Teaching Through Simulations	I plan to look at how experiential learning, focusing on simulations in the history classroom can impact student learning. The outcome of this project is to invite other SGIS teachers for a collaborative conference to learn about, share and troubleshoot issues with simulation-based learning.		X	
Use of Comics in French Language Acquisition Classes	Often Comics are considered as reading resources for students having acquired a second language to a certain extent. However with the right scaffolding strategies, comics serve as good pedagogical resources to learn the language and the intercultural elements. My work aims to create a bank of pedagogical resources for the Beginners, Intermediate and Advanced French classes with accompanying worksheets that teachers can use directly in their class. These worksheets can also serve as alternate evaluation tools in addition to the traditional evaluation tools used in the French classes at AIS.	X		

## **Cohesive Teacher Knowledge**

Alone, we can do so little; together, we can do so much.

—Helen Keller

### **Introduction**

Cohesive teacher knowledge, as emphasized by Donohoo et al. (2020), denotes a shared understanding among educators of effective teaching practices. This understanding is crucial for collaborative efforts and professional development, enabling collective teacher efficacy and positively impacting student learning outcomes. When asked about this factor of collective teacher efficacy, Enna stated, “Cohesive teacher knowledge, I think that it’s a tricky one here.”

### **Not on the Same Page**

According to educators and administration at AIS, there needs to be more cohesion and collaboration among teachers, each expressing challenges related to maintaining consistency in educational practices. Todd emphasized the difficulty in finding time for collaboration while speaking of the teachers in rooms next to his: “We do our own thing. It's so weird because it's [teacher with the same classes] just behind that wall, right? I would love to co-teach more, learn from it more, but it’s just, it's hard to find the time.” Enna also connected to the lack of time to collaborate with peers on what is happening in classrooms: “I'm still finding [it] difficult because it's hard here to find time, time for teachers to meet. I think it's even difficult for departments to meet. Like they met this morning, I don't think they've met in a very long time to talk about curriculum.”

Maddox's thoughts were along the same lines: Time is necessary for teachers to share and challenge each other’s pedagogical and content knowledge: “I want more time. I alluded to time as a resource here, and it's tricky. But that's one big thing: coming together as a faculty to talk

about it [teacher knowledge], have discourse on it [teacher knowledge].” Nakoa further described the lack of collaboration as teachers functioning like independent contractors: “I don’t think there was much at all that was being done about keeping teachers on the same page. I think it was basically like, you know, and I’ve experienced this in other schools too, where teachers are kind of like independent contractors of sorts.”

The isolation described by Todd and Nakoa could be intimidating for new teachers as they joined the Alpine staff. Todd made this connection when he reflected on the cohesive teacher knowledge using a Likert scale to represent his thoughts quantitatively: “So one to ten, it would be low, unfortunately. I’m so glad that I am an experienced teacher because I think coming here if you weren’t [an experienced teacher], it’d be scary.”

Erin's insight delved into the intricate web of challenges stemming from the lack of cohesive teacher knowledge at AIS, particularly emphasizing the absence of vertical and horizontal alignment in curriculum due to the high turnover rate: “There’s no vertical alignment or horizontal alignment of curriculum because nobody can do it because nobody stays.” This sentiment accentuates the difficulty in sustaining collaborative efforts and maintaining consistency across classes, a sentiment echoed by Levi, who pointed out the absence of an organized curriculum as a potential hindrance to teacher support: “If there's not an organized curriculum except for when you can lean on an outside program like IB then is that a level of non-support for teachers? Probably.” Classes held at Blanc Campus were based on standards adopted by Alpine staff. These classes were not being held accountable by an overarching organization like the school districts found in public schools. However, the Bèraud Campus housed all AIS's IB and AP classes. Nakoa highlighted the rigid structure of these programs, which might limit teachers' autonomy and creativity, creating a gap between classes with more

free reign, like those at Blanc, to meet the students where they were: “It's pretty prescribed. Like if you're an IB teacher, you have a pretty prescribed curriculum.” Not only did the types of classes differ in the two campuses, but Maddox referred to the physical distance being a characteristic of the school, possibly interfering with the cohesive teacher knowledge: “It's a common refrain here is that our physical distance across the campuses can also create a kind of a practical distance in terms of what we're aware of the other side is doing.”

In response to these challenges, Maeve suggested the implementation of ManageBac (2024), an online platform designed specifically for international schools, offering tools for curriculum planning, assessment, reporting, and communication as a possible solution to establish a common direction and document curriculum, thus providing a framework for teachers to build upon: “I think the ManageBac piece will help kind of put people in the same direction and then have the curriculum documented so people can start from there rather than come in with nothing.” Neil further emphasized this effort, mentioning expectations for teachers to input their plans and reflections into ManageBac, providing a curriculum and better support for future Alpine staff: “There is a requirement to put in things and ManageBac so that if a teacher moves into my classes, there's fairly well-documented planning and reflections on what I've taught and what my pacing has been.”

However, Levi's observation of initiatives being abandoned due to distractions and turnover added depth to the discussion, highlighting the ongoing struggle to foster collaboration and maintain consistency amidst these challenges: “I suppose in schools, if something gets difficult or has a dip or it looks like you're going backward for whatever reason, things tend to get dropped. Things, in my experience, things seem to last like about three years, and then people move on.” These perspectives vividly depicted the complexities surrounding cohesive teacher

knowledge at AIS, emphasizing the need for concerted efforts to overcome barriers and promote a more unified educational environment. Despite these challenges, collaborative efforts among teachers served as a beacon of hope, showcasing the potential for fostering cohesive teacher knowledge through collective action.

### **Bridging the Gap Between Campuses**

Snow-covered boots echoed down the stairs, leaving glistening droplets on the plush carpet as the mathematics faculty descended to the first-floor classrooms. The elongated room featured small windows adorning the top of the southern wall. At the same time, sturdy concrete floors and a low ceiling, reminiscent of a bunker, served as both a literal and metaphorical foundation for the Bèraud Campus. A couple of comfortable couches along the back wall provided a space for the teachers to shed their snow-covered attire, revealing professional business clothes underneath.

The room's designated teacher collaborated with the department head to connect the school-provided MacBook Pro to the SmartBoard in preparation for the meeting. As the math teachers settled into the metal and wooden chairs, the department head kicked off the proceedings by extending a warm welcome back from Winter break, verbally outlining the agenda for the upcoming 90-minute meeting. All present educators displayed attentiveness and respect as the department head animatedly shared school updates including a small celebration of student achievements on an international mathematics test. Many teachers present had experienced ESI in some form including one of the ERA leaders who guided Exploring Scholar projects.

Following the comprehensive update, the department head alluded to the school-wide initiative of vertically aligning classes across departments. The teachers then divided into two

groups, each facilitated by two IB teachers. Tables were covered in packets containing class progressions, Algebra 1 and Algebra 2 scope and sequences, and photocopies of the IB textbook table of contents. Armed with these resources and their tacit knowledge of pacing and student needs, the discussions delved deep into the skills and content necessary for success in IB, exploring their coverage and practice in lower-level classes. The passion for understanding students' current skills and envisioning the trajectory required for their success was palpable as every teacher added to the discussion. Each speaker showcased a profound comprehension of mathematical concepts and a keen awareness of their students' current standing. These comprehensive discussions highlighted a skill lacking the essential foundation in Algebra 1, sparking a nuanced exploration around the priorities of other scope and sequence topics. The discourse delved into what could be either eliminated or strategically shifted to address the identified gap better.

As the conversations gradually subsided, the department head signaled the conclusion of the collaborative group work, inviting a representative from each group to articulate the key takeaways from their discussions. A unanimous theme emerged among the teachers – a shared commitment to student success. Leveraging each teacher's insights into students' abilities, they aimed to chart a pathway through the math classes offered at AIS that would optimally foster the growth of the student's mathematical knowledge even if that pathway does not culminate in an IB class.

### **The Exploring Scholars Pocket**

The Educational Research at Alpine Exploring Scholars Application 2023/2024 (see Appendix D) asked one question and shared three requirements related to the development of cohesive teacher knowledge:

- How will you collaborate with other faculty or others outside of [AIS]? This question encouraged Exploring Scholars to collaborate with their AIS peers and individuals outside the school community. By fostering collaboration, it promoted sharing knowledge, expertise, and best practices among educators, contributing to collective teacher knowledge.
- Confirmation of the additional requirements of all [Exploring Scholars]: Poster depiction of the project before leaving for Summer 2024. Requiring Exploring Scholars to create a poster depicting their project before departing for the summer highlighted the importance of sharing their research and findings with the broader school community. This act of visual representation not only allowed for the dissemination of knowledge within AIS but provided an opportunity for feedback and discussion, further enriching collective teacher knowledge.
- Confirmation of the additional requirements of all [Exploring Scholars]: [ERA Learning Sessions], each [Exploring Scholar] was expected to schedule, prepare, and hold an informal talk for students and faculty. By mandating ERA Learning Sessions, the ESI facilitated sharing scholarly work and insights with students and faculty. These talks served as platforms for Exploring Scholars to present their research, engage in discussions, and exchange ideas, thereby contributing to the collective learning and knowledge base of the entire Alpine community.
- Confirmation of the additional requirements of all [Exploring Scholars]: Publishing your work. Each [exploring scholar] was expected to publish on a theme related to your project, either for the [ERA] site at, for an online and/or print journal, or a talk for the [ERA] podcast (with help from the [ERA] team). Requiring Exploring

Scholars to publish their work contributed to cohesive teacher knowledge by ensuring the insights gained from their projects are disseminated widely within the educational community. By publishing their findings on the ERA site, in online or print journals, or through the ERA podcast, scholars made their research accessible to a broader audience of educators. This sharing of knowledge allowed other teachers to benefit from the insights, strategies, and best practices developed by the Exploring Scholars, thereby enriching the collective knowledge base of the teaching profession. Additionally, the act of publishing encouraged scholars to critically reflect on their work, refine their ideas, and contribute to ongoing conversations in the field of education. Overall, the requirement to publish work related to their projects helped to build a shared understanding of effective teaching practices and supported collaborative learning among educators.

The ESI sought to foster cohesive teacher knowledge through collaboration and knowledge sharing. As Maddox pointed out, these initiatives transformed a solitary teaching profession into a collaborative and celebratory endeavor: “Teaching can be a very solitary, isolated profession, and I think the [Exploring Scholars Initiative] is celebratory and celebratory of strengths.” Ultimately, this PL program pursued a culture of learning and collaboration as Levi highlighted in his description of the ES: “The cohesiveness is a culture that learns, a school that learns.” By engaging in the ES, educators could break away from traditional teaching methods by fostering self-directed learning experiences and ultimately bridging the gap between theory and practice. Elis shared her thoughts on what made the ESI stand apart:

As teachers, I feel like we’re really good about talking about what best practices are and knowing what best practices are and still like having a classroom where the kids are all in



rows, and we stand up there and show power points slides [laughing] and tell them information that they need to know to perform on a test, right? There's a lapse in terms of what we know is best practice and what we do. I feel like the [Exploring Scholars Initiative] is an opportunity not just to pursue your passion and learn about a particular topic as part of your professional development but also to experience what a more self-directed learning experience would feel like. I think both of those things are really valuable because many people, almost all of us, who have successfully become teachers are products of a system that is antiquated.

The program encouraged educators to integrate best practices into their teaching methods through collaboration, knowledge sharing, and a culture of learning. These practices enhanced cohesive teacher knowledge and ultimately benefitted student learning outcomes.

Many educators saw the benefits of knowledge sharing in terms of the ERA Learning Sessions, which extended beyond the scholars' learning. Yagna elaborated on the approach other teachers had when they attended the ERA Learning Sessions:

We learn from each other because when a person does a presentation, it's not just listening to what they have done for the students. We are also taking notes, and we are extrapolating that information to our class and our practices and saying what can be modified in our practices.

Despite their potential to enrich professional development and promote knowledge sharing among educators, the ERA Learning Sessions appeared to be underutilized within the Alpine community. Enna highlighted this issue, expressing uncertainty about the talks' attendance levels and suggesting that teachers might not perceive them as a high priority due to scheduling constraints and fatigue:

I'm not sure if the attendance of those [ERA Learning Sessions] is super high. The resources are shared with us after the fact, but I don't know. It's usually on a Tuesday afternoon, evening, or something, and the teachers are pretty tired. So I don't know the scale of importance it is for everybody. Or if it was something they were interested in then, I'm sure they'd make the time to go, but I do think that it can be difficult to kind of get people to come along and come along to those.

Enna also proposed solutions to enhance the relevance and impact of the ERA Learning Sessions. She suggested making attendance obligatory for at least one representative from each department to ensure broader participation and dissemination of research findings within teams. Additionally, Enna recommended integrating the presentations into staff orientation sessions or dedicating professional development days specifically to the learning sessions:

I think if the [Exploring Scholars] are taking the time to do the research and to present, I think it would be a good idea if it was sort of made obligatory that everybody, at least one person from each department maybe came and, you know, soaked in that research and then maybe brought it back to their team.

This approach would provide a structured opportunity for Exploring Scholars to showcase their research and for educators to glean practical insights to inform their teaching practices.

Neil echoed Enna's sentiments, expressing confidence in ERA's leadership and advocating for a more formal acknowledgment of the Exploring Scholars' contributions. He suggested incorporating the presentations into staff orientation sessions, where educators could engage in brief exchanges to share practical takeaways and insights:

I think if the [Exploring Scholars] were given like a PD day or a spot, like a morning session in the staff orientation at the beginning of the year, then I think they would do

well with that. I have a lot of faith in the leadership of ERA, who are the, you know, drive the steering committee of the [Exploring Scholars Initiative]. And so, I think if it were sort of a speed date, what are you doing, you know, with something practical that everyone could take away and potentially put in place and inform their teaching practice, I think that would be great.

Lynn also addressed the importance of senior management's involvement in promoting and recognizing the ERA Learning Sessions: "It would be great if the senior management would take more of an interest and there would be some sort of formal acknowledgment of what you're learning and how you're in putting it into your work." She emphasized the need for formally acknowledging educators' learning and integration into their work, suggesting that increased senior management interest could enhance the talks' visibility and impact.

Overall, Alpine staff's perspectives shed light on the challenges facing the ERA Learning Sessions and offered constructive suggestions for maximizing their effectiveness in fostering professional growth and knowledge sharing within the Alpine community.

### **Lost Opportunity to Learn from an Alum**

As the vibrant hum of anticipation filled the Blanc Library, five staff members (all current or past Exploring Scholars), two Global Scholars, and 10 students collaborated to rearrange tables and chairs, adjusting to the unexpected surge in audience size. Students huddled together and staff members fetched chairs from nearby tables, crafting an impromptu back row. Aromas from the cafeteria's dinner floated through the air, reminding everyone of the late hour. A few staff members, balancing plates in hand, had wisely brought their meals to the presentation, skillfully merging dining and learning into their busy schedules. The library, a professional learning environment filled with towering bookshelves, student workspaces, and

windows framing the velvety night sky, was the perfect venue for the group of dedicated learners.

The Director of Research had organized and promoted a presentation by an alum who planned to share a strategy acquired during their world-renowned MBA program. With a coordinated effort, the Director of Research and the alum fine-tuned the presentation setup, ensuring the in-person and virtual audience felt seamlessly included. Enthusiasm radiated from the Director of Research as he addressed the diverse audience, expressing gratitude for their unwavering support of ERA. A seamless transition ushered in an online participant—a retired Alpine teacher and former Exploring Scholar—to introduce the Global Scholar with a recap of their time at AIS as a student and their work to create their stamp on the world since. The room buzzed with palpable energy as the Alpine alum, cradling a cup of warm tea, slightly swayed while unraveling the intricacies of the teaching technique found throughout her nationally acclaimed MBA classes: case studies. Engrossed Alpine teachers and students hung on her every word as she vividly painted a picture of collaborative, real-world learning—an experience intricately linked to pursuing meaningful careers.

The alum presented a sample case interview to ensure the audience thoroughly understood the power of the case study approach. As the interviewer, she read:

Our client is Ice Cream Com, a mid-size ice cream retailer in the Southeast region. You have been working with the VP of Sales & Marketing to figure out why profitability is down 20% in the last year. She has hired you to find out why this is happening and how to fix it. Here are a couple of example questions to get you thinking:

1. Have our competitors also seen a decline in profitability?
2.  $\text{Profits} = \text{Revenues} - \text{Costs}$ ; which of these has changed to lead to the decline?

I'll give you a couple of minutes to think about other questions you might ask to get the information you need.

Teachers pushed away their empty plates and the ambiance buzzed with animated discussions among staff and students. Conversations swirled around the presented case, resonating with an energized hum. The alum set aside her tea and engaged in a hushed conversation with the online audience. Seizing the lull, the Director of Research diligently recorded the staff present, intending to extend the presentation's insights to them via email.

The alum gracefully assumed center stage as the buzz subsided, inviting volunteers to contribute their thoughts. Surprisingly, students and staff eagerly raised their hands, reflecting a shared curiosity about business. Students posed thoughtful questions, showcasing their interest and a commendable grasp of the subject matter. Staff, recognizing the opportunity, filled in gaps, steering the discourse to a comprehensive exploration. The alum graciously extended a Q&A segment as the session concluded, reigniting the students' fervor for engagement. Amid a flurry of inquiries, the Director of Research expressed gratitude to all, acknowledging the valuable insights shared by the alum with both staff and students alike.

The Exploring Scholars Initiative contributed to the development of collective teacher efficacy by addressing cohesive teacher knowledge through various initiatives to foster collaboration, knowledge sharing, and a learning culture. Despite challenges highlighted by Alpine educators regarding a lack of cohesion and collaboration among teachers, the program serves as a catalyst for bridging these gaps. Overall, the ESI is a platform for educators to integrate best practices into their teaching methods, ultimately enhancing cohesive teacher knowledge and benefiting student learning outcomes.

## **Embedded Reflective Practices**

We do not learn from experience, we learn from reflecting on experience.

—John Dewey

### **Introduction**

As outlined by Donohoo et al. (2020), embedded reflective practices in education involve educators systematically examining student evidence and feedback collaboratively to improve instructional practices, fostering a culture of ongoing self-reflection and data-driven decision-making, which enhances teacher collaboration, professional growth, and student outcomes. According to the educators and administration at AIS, a culture of reflection was deeply woven into the fabric of their school community, permeating various aspects of their sustained systems and structures. From the yearly appraisal system, which encompasses self-appraisal, goal setting, student survey reflections, classroom observations, and constructive feedback sessions, to the positive and meaningful dialogue fostered during observation and feedback processes, the structures continuously provided space to engage in thoughtful introspection and improvement.

### **Systematic Reflection at Alpine International School**

Maddox provided insight into the comprehensive appraisal process currently implemented at AIS:

We do have a self-appraisal model teachers engage in every year where we set a goal and, at the end of the year, as part of the appraisal process with department heads, will kind of self-evaluate and reflect on that goal. There is also a requirement of teachers to reflect on student surveys at least once a year.

The observation and feedback process is more than a mundane task; it's a constructive and reflective dialogue to enhance professional growth. Neil shared his perspective on this integral

aspect of the professional development at AIS, noting it was more than just a mere box-ticking exercise:

There's a certain number of observations and drop-ins that should take place through the year, and then [a] sort of feedback session on what's going on. I always find those really helpful....we also set a goal, a professional goal, and your department head checks in with you about how you're meeting that goal or what you could do to meet it better. And always, in a way, for me, it's not been from a perspective of, like, have you met your goal? But it's genuinely just a positive, reflective process, not one that's kind of ticking boxes, just to tick boxes or to micromanage.

Another crucial aspect of the appraisal process that prompted teacher reflection was the utilization of student surveys. Lynn highlighted the systematic approach of gathering feedback from students every semester, emphasizing its role in shaping teaching methods, evaluating resources, and identifying areas for improvement:

The students, we ask them every semester to just sort of give us some feedback about how we're teaching them what they're learning, our resources, what would work for them better, how we can improve. So that's built in, that's an expectation, we have to do that. And that is throughout the school...

The process of continuous feedback from students and reflection served as a catalyst for growth and improvement among educators. Maeve outlined the significance of this ongoing reflection by highlighting the structured approach implemented by leadership: "They [Leadership] do encourage it to happen at different times. All teachers do a student survey in November, December... but the idea is you reflect on that." This structured feedback loop was further emphasized as Maeve explained: "They [Leadership] encourage you to be writing that

into your reflection document already in December, and your review isn't really until like April, May.” Thus, this systematic approach ensured reflection was integrated into the teaching practice throughout the year, fostering a culture of continuous improvement and professional development.

Overall, educators perceived the appraisal process at AIS as reflective and supportive. Audrey described it as “a very reflective appraisal process but still called an appraisal process.” Audrey’s opinion indicated that despite being labeled as an appraisal, the process served as a platform for deep introspection and self-evaluation. Lynn shared, “It's all kind of, it's not an appraisal, it's more, they've got a word for it, and I've forgotten it, but it's more of a supportive process rather than a calling you out.” Here, Lynn underscored the supportive nature of the process, suggesting it fostered growth and development rather than critique or reprimand. Simon summarized by stating, “That’s the nature of our appraisal process here, that it’s not top-down; it’s a two-way conversation.” Simon's perspective highlighted the interactive aspect of the process, emphasizing that it encouraged dialogue and collaboration between teachers and administrators, allowing for mutual understanding and continuous improvement. This reflective approach to the appraisal process promoted professional growth and enhanced teacher efficacy by encouraging self-assessment, goal-setting, and ongoing dialogue for improvement.

Another layer of reflection came from the school-wide format for unit plans. Unit plans currently stored on ManageBac (2024) were enhanced to include reflective elements to improve instructional practices and refine curriculum delivery. This integration involved adding two key reflection questions to each unit plan's conclusion, inviting educators to critically evaluate their teaching methods and make informed adjustments for future instruction. As described by Maeve, this reflective practice was an integral component of curriculum development:



They're [reflective practices] in the unit plans now. There's questions that, in theory, as soon as you finish teaching a unit, you're supposed to put [in] the reflection. There's two different questions. One basically talks about what went well, and the other one is what would you change for next time. So that's built into part of the unit planner, and the idea is that as you teach it, like if I taught a unit last year and I'm teaching it this year, I can look at my reflection from last year, make changes, and then reflect again.

However, concerns about accountability arose as highlighted by Myles: "I guess the curriculum sort of reflection after every unit on ManageBac. But who's monitoring that? I don't know."

A third significant avenue for systematic reflection emerged when teachers wrote student comments. This practice provided feedback to students and their families and fostered a reflective stance among educators. This approach acknowledged the importance of recognizing and analyzing the insight gleaned from the comments, turning a routine task into a deliberate opportunity for professional growth. As Erin shared, the volume of comments she had authored this year demonstrated the depth of reflection involved: "I've written 65 pages of comments so far this year. That's the total that I've done for report card comments." Neil shed light on the evolution of this reflective practice, emphasizing its newfound dedication to analysis and discussion:

One of the efforts that I think should be recognized to have embedded reflective practices is we used to write these student comments and then we never knew if anyone read them. Now we have a dedicated time where, with a very small advisory group, we go read your comments. Okay. What did you see come out from that? And so that's an embedded reflective practice that's been put in place this year that I think came with the students, with the teachers, you know, there is that reflective practice.

Lastly, AIS had just completed the accreditation process for the New England Association for Schools and Colleges (NEASC, 2024). The NEASC described the intention of the accreditation process:

It is intended to serve as a framework for schools to meet their own unique goals for student learning while maintaining alignment with research-based Standards for Accreditation that define the characteristics of high quality, effective learning communities. It also serves to assess the systems in place for ongoing institutional self-reflection and a school's commitment to and capacity for continuous growth and/or transformation. (p. 1)

Both teachers and administrators widely acknowledged the significance of the accreditation review process at AIS. Maddox highlighted its impact on the school community, noting how the review process effectively prompted a pause for reflection: "The grand irony of those reviews for me is always like, it is such a good reflective process, and it stops the typical work of a school. Kind of freezes it." Erin and Enna further elaborated on the structured opportunities provided for reflection during the review process. Erin mentioned, "There were like three opportunities for people to sit in on panels and discuss." At the same time, Enna emphasized the value of group reflection sessions: "We were in groups reflecting on school practices in general, right across the board. So that was probably quite a useful tool."

Individual teachers also experienced the depth of the review process firsthand as NEASC (2024) accreditation team members conducted classroom observations. Myles shared his experience of classroom visits: "When we were doing appraisal as a school for accreditation, I guess these people from the accreditation came in, and they were observing. One lady came into my classroom." While this formalized process could yield beneficial outcomes for strategic

planning and future school-wide initiatives, it could also pose challenges, as Elis pointed out. She described the accreditation process as both “painful and restrictive,” acknowledging the necessary review it entailed for teachers and administrators.

These established structures, the appraisal process, unit plans, student comments, and accreditation processes, fostered a culture of reflection, actively involving Alpine staff in ongoing reflective processes throughout different cycles, filling the academic year and beyond. So, how did the ESI contribute to these reflective practices for educators committed to their passion projects?

### **Reflection in Exploring Scholars Initiative**

All the existing reflection structures available for Alpine staff were excellent channels for Exploring Scholars to reflect on their passion projects. Still, the ESI implemented two key structures allowing reflection centered on their passion project: checkpoints and a final presentation with a poster upon project completion. Yagna delineated the timeline:

We've got three points, checkpoints in the whole process. Also, we are asked first to make our own calendar, and I think we do a little bit of backward planning. I think that's how we do it. When we start the project, we are asked to tell when we want to present our project to the whole community. So let's say, for example, mine is now in February. I know because my presentation is in February, I need to have three checkpoints before that.

Aria found the check-in sessions to be instrumental for reflection, stating, “We do have those check-in sessions, and that did kind of give us a kick-up kicker...that did really because we were struggling at that point and it made us go, okay, are we doing this?” Todd emphasized the accountability instilled by the required presentation and poster, explaining, “There’s some built-

in accountability because we had to make a poster, I had to give a presentation. There are some very concrete milestones, which is good because it's making me think, how am I going to synthesize all of this for my presentation?"

Lynn also highlighted the reflective nature of the presentation itself by sharing, "The main reflective practice came when you had to present." Despite the reflective opportunities offered by these structures for teachers to engage in their professional development, the leadership of the ESI emphasized the importance of reflection as a fundamental aspect of each individual's passion project experience. Todd stressed the significance of this aspect, stating, "It was emphasized from the beginning to prioritize finding time for reflection."

The Exploring Scholars exhibited a natural inclination towards reflection on an individual level, indicating a deeply ingrained practice within their professional approach. Enna expressed this sentiment by stating, "I think constantly I'm reflecting," suggesting an ongoing and inherent process. Similarly, Maeve acknowledged that reflection occurred naturally within her line of work, indicating a continuous and organic practice: "I think a lot of it happens naturally. Maybe it's our line of work, but I feel like constantly reflecting." Yagna expanded on this notion, describing reflection as a daily occurrence intertwined with his teaching responsibilities and project planning:

Reflection on a daily, I wouldn't say I would do it formally, but probably every teacher is sort of engineered to do constant reflection and self-questioning. So I do it all the time.

So, anytime we teach a lesson, we don't teach a lesson. Students are doing something, not doing something. We're thinking of a project and doing some planning, some part of the same. There is this reflection that's going on all the time.

Yagna's thoughts highlighted a seamless integration of reflection into their daily routines. Lynn

further emphasized the individualized nature of reflection: “I do think it's probably person specific. Some people are better at being a bit more critical and self-analytical and have that kind of metacognition than others.” She suggested that some individuals possessed a greater propensity for critical self-analysis and metacognition than others. These quotes underscored the intuitive and ingrained nature of reflection among Exploring scholars, potentially influencing the depth and frequency of embedded reflection within their scholarly endeavors.

Todd provided a comprehensive overview of his Exploring Scholar project, showcasing how reflection served as an inspiration for ongoing growth in his role as an educator. His narrative offered insight into the convergence of Alpine's reflective ethos, innate tendencies towards reflection, and the structure of the ESI. Together, these elements underscored the significant influence of cultivating a culture of reflection within educational settings.

### **Find That Time to Reflect**

Inundated by bright sunlight, the workspace emanated warmth, casting a golden glow upon the natural wood floors, ceilings, and pristine white walls. Peering through the window into Todd's classroom, a scene unfolded—students hunched over desks, engrossed in an undisclosed project, while Todd conferenced one-on-one with students. Outside this engaged classroom, loud footsteps reverberated through the hall and workspace as administrative personnel navigated the learning environment, engrossed in their administrative duties. No bell signaled the transition, yet three distinct classroom doors swung open simultaneously, marking the conclusion of a class period.

Within Todd's domain, students rose, diligently packed their belongings, and prepared to pivot from one subject to the next. Positioned by his door, Todd bid each student farewell, their conversations intermingling with the resounding echoes of footsteps, creating the organic chaos

characteristic of a passing period. Once the classroom emptied and the last remnants of footsteps faded away, Todd settled at a student table, poised to contemplate his journey with the Exploring Scholars Initiative. His passion project was designed around student feedback and teacher reflection. At the end of each term, Todd's students were given academic time to answer questions in an online forum based on their learning experience, not class content. After Todd took the students' answers, he claimed to "summarize, look for patterns, and then reflect on each case and say, 'So what?' Then, based on the patterns, I say, 'These are the ones that I'm actually gonna choose to work on' because I can't fix 20 things at once." Todd had already completed this iterative process with his students a couple of times, and he felt his reflection was having a positive impact on students:

I think what they [the students] liked is also what the Global Scholar said, making it transparent. Tell them [the students] you're doing this, and you're actually going to take on the feedback. They [the students] would love to hear that... and they did! It was, "I'm going to do some of the things now, guys, that you said to do," and they're like, "Yeah, good. He's listening!"

This personal reflection, though, seemed to be right in line with Todd's understanding of reflection at AIS as a whole:

We're all constantly reflecting on our practice. It's the culture to be. It's a positive culture.... When we sat down yesterday morning, and without any senior leaders in the room, people are just doing the work. "Oh, you tried this, you tried that." It's a highly professional environment. It's really nice, and it rubs off.

The ESI at AIS contributed to the development of embedded reflective practices in CTE by fostering a culture of ongoing self-reflection and collaboration among educators. These

practices were evident in the systematic examination of student evidence and feedback, collaborative dialogue to improve instructional practices, and structured opportunities for professional growth. The program incorporated key structures such as checkpoints and final presentations with posters, providing concrete milestones for reflection and accountability. Educators like Todd emphasized the importance of prioritizing reflection in their passion projects, highlighting its integral role in personal and professional growth. Furthermore, the intuitive and ingrained nature of reflection among Exploring Scholars underscored its significance in shaping instructional practices and fostering a culture of continuous improvement within the educational community.

### **Empowered Teachers**

Only I can change my life. No one can do it for me.

—Carol Burnett

### **Introduction**

Empowered teachers possess increased agency, autonomy, and influence in their professional capacities, enabling them to shape instructional practices, classroom environments, and student learning experiences (Donohoo et al., 2020; Smylie, 1988). Educators at AIS expressed a strong sense of autonomy within their classrooms, highlighting the freedom they experienced in their professional roles. Todd reflected on his experience, noting, “I’ve never worked at a school where I had more autonomy.” Similarly, Erin emphasized her unrestricted freedom: “I have free reign to work and do and be anything I want to be.” Neil highlighted the autonomy given the student results was not measured outside of AIS: “I feel I’m given a lot of autonomy and support here, regardless [of ES]. I feel like I have a lot of autonomy, with the

caveat that I'm not teaching classes where there are outside high-stakes tests like AP [Advanced Placement] and IB [International Baccalaureate].”

Simon’s thoughts matched Neil’s: “A huge amount of empowerment and a huge amount of flexibility for teachers, particularly outside of the externally examined courses like the AP and the IB.” These quotes collectively illustrated teachers' pervasive autonomy at AIS, indicative of a culture that values and empowers educators to make independent decisions in their classrooms.

Regarding empowerment beyond the classroom, professional development programs, such as the Initial Scholars Program and the Exploring Scholars Initiative, provided support while allowing educators to determine the appropriate content and learning path to grow as professional educators. Initial Scholars is the induction program for all educators new to AIS. The purpose of all AIS professional learning programs is outlined in the Initial Scholar Handbook (see Appendix E):

The purpose of the [AIS] professional learning programs is to give us time to reflect on our teaching and to collaborate with each other as colleagues and professionals. Being effective in our job makes us as teachers feel good. Being the best teachers we can be directly contributes to student learning...Raising our awareness is useful whether we are rookies or veterans in the classroom. None of us has been so long in the classroom that thinking about how we teach – and how students learn – is without value. You may be an experienced teacher, but the type of students at [AIS] may be new for you. You may be working with a new curriculum. You may have recently added new material to a class. You may be new to boarding school. You may have established great habits that work well, but to keep yourself motivated, you want to try new approaches. You might even have some bad habits. Whatever your circumstance, there is always something to learn –



if you are open to learning. While this handbook describes [Initial Scholars] only, it also sets the tone for future professional learning and ideally facilitates the building of collegial bonds to sustain you as a professional for your tenure at [AIS].

### **Setting the Stage**

In the small Béraud Campus kitchen, an enticing array of breakfast delights awaited the teachers. The focal point was a decadent display of warm chocolate-filled croissants encircled by an assortment of pastries, artisanal cheeses, and vibrant fruits. The air hummed with the whir of a freshly squeezed orange juice machine, its resonant echoes punctuating the calm atmosphere. As teachers left the kitchen with small plates heaped with eggs and bacon, they found seats next to their peers at long wooden tables near the entrance to the cafeteria.

The cafeteria, adorned with intricately crafted wooden panels on both walls and ceiling, enveloped the space in a tapestry of warmth and elegance. Soft amber lighting played upon every surface, casting a gentle glow and creating a sanctuary of visual allure. The usual buzz of the cafeteria was subdued as the early hour was hushed, interrupted only by quiet murmurs and the occasional clinking of silverware. The ambiance was one of serenity and anticipation. As the clock hands approached 8:00 am, teachers formed pairs and began to meander out of the cafeteria, their footsteps echoing down the long, empty hallway. The journey led them past the library, through the foyer, and beyond several administrators' offices, each step resonating with a sense of purpose. The new teacher's destination: the eagerly awaited professional development session for Initial Scholars, a promising morning filled with collaborative learning and shared insights.

Nestled in a cozy half-circle, an ERA leader warmly welcomed this year's new teachers in their inviting classroom. The white walls were covered in student work, including artwork and

posters of literary themes. A polished wooden floor echoes footsteps as the instructor paced during his introduction. Exposed beams supported vaulted ceilings and brought an air of elegance to the learning space. A screen flanked by whiteboards shared the agenda for the morning's work. Expansive windows flooded the space with natural morning sunlight, creating an atmosphere ripe for learning. To set a lighthearted tone, the instructional leader kicked off the professional development session with a YouTube snippet from *Ferris Bueller's Day Off* (2011), evoking laughter as the familiar monotone call of "Anyone, anyone?" echoed through the room.

As the chuckles subsided, the ambiance remained vibrant, fostering an environment where teachers felt comfortable to reflect and engage in discussions about their growth as educators within the Alpine community. Animated conversations filled the air as educators shared personal experiences and expressed their current needs. Four teachers decided to group based on their need for better strategies to differentiate and support the multi-lingual learners in their classrooms. Two teachers from the Math department decided to collaborate on their common prep, Algebra 2, looking at student data and strategies within the department's set scope and sequence. Two language teachers created a learning path specific to teaching French, focusing on engagement activities for students who already speak multiple languages.

The ERA leader, a full-time teacher and department head, stood beside a table near the front of the room, called for attention, and swiftly outlined the requirements for Initial Scholars—a foundational professional learning opportunity mandated for all new Alpine teachers. Every teacher was authentically engaged, heads nodding and eyes focused. The ERA leader shared that each teacher would continue working with their chosen group and content to complete five commitments. These commitments include participation in whole group meetings, engaging in small group discussions, conducting peer observations, recording and analyzing classroom

videos, and welcoming third-party observations. Each of these commitments plays a crucial role in preparing new teachers for the challenges and opportunities they will encounter in their roles.

The room exuded an atmosphere of purposeful engagement, where teachers approached their new tasks with a sense of gravity and dedication. Yet, amidst this earnestness, an air of respect, curiosity, and excitement lingered. Conversations hummed as groups planned their next steps. Immersed in their work, each teacher radiated a palpable enthusiasm for the learning process, eager to explore new ideas and perspectives through the laid-out tasks. This mix of seriousness and enthusiasm created a dynamic environment, fostering collaboration, innovation, and a deep sense of collective purpose among the educators gathered within its walls. This structured approach to professional development sets the stage for the deeper engagement and reflective practices inherent in the Exploring Scholars Initiative, laying a solid foundation for continued growth and innovation among educators at AIS.

### **One Hundred Percent**

Upon acceptance into the ES, educators are granted many opportunities for professional growth and fulfillment. These opportunities include pursuing personal passion projects, receiving support for their professional development, engaging in rigorous research endeavors, sharing their discoveries with colleagues, and garnering recognition for their dedication and achievements within the educational community. Yagna's statement captured it all:

I would say it's 100 percent empowerment. What I really like and appreciate about this [Exploring Scholars Initiative] and that makes me very engaged in this process is we are given a carte blanche. We could choose a project of any type we want to work on, on any area, any discipline, any approach. We are given complete freedom, thereby giving us opportunities to learn from our mistakes. We are also told very clearly the project doesn't

have to always end in a fantastic something that's a tangible output. It's a learning process. So, if it doesn't culminate in anything concrete, it's absolutely fine. As long as you're able to observe your learning process in this and you're able to glean away something from it, it's nice. I think that kind of empowerment makes us really take risks and go forward, and we wouldn't hesitate to venture into areas that look a little gray.

Elis found the same profound impact within ES, noting how it counteracted the usual constraints and objectives faced by educators, allowing them to prioritize their passions:

I think it's huge [laugh]. Yeah, so just strictly to answer that question, I think It's almost overwhelming as a teacher where you're often dealing with constraints and other people's objectives to be told, 'What are you really passionate about? We want to support you in pursuing that.' So it's incredibly empowering.

Enna echoed this sentiment, underscoring the PL program's role in facilitating research aligned with individual interests and enabling collaboration among all Alpine staff: "I just think it's a really good opportunity for teachers to find ways to research something that they're interested in, and then to share it with the faculty and see who could join them." Nakoa expressed appreciation for the recognition bestowed upon teachers through the program, highlighting the significance of being acknowledged for their contributions: "I think teachers are just excited to be able to be recognized to do projects that they're interested in." Neil attributed a significant portion of his sense of empowerment to the ES: "I do feel empowered, and a lot of it is the ERA program." Lastly, Myles articulated the internalization of autonomy and agency fostered by the program, emphasizing its role in empowering educators personally: "It's more empowerment of myself and as the educator."

These ideas on empowerment all fit Levi's thoughts on the goals of the ES: "The goal is for it to be empowering. It works for many, but they still have to bring a certain amount of desire to it." Every teacher accepted into the ESI had to apply, indicating a previous interest in growing their skills. For example, Neil shared the following about his passion project:

It's something I already wanted to do, and this [Exploring Scholars Initiative] was the encouragement to do it. And it definitely has encouraged me this year to focus on these approaches. It impacted my pacing because I was like, well, these are things I need to do because it is my [Exploring Scholar] project. So rather than being something that I do, it became more of a focus.

Neil's passion project was already taking place in his classes. The ESI gave him the perfect nudge to make his passion a priority. So, as Maddox pointed out, was the program empowering people, or were the people choosing to go into the program already empowered?

More realistically, it's probably the effect of they're [Exploring Scholars] that way [empowered] to begin with, and that's why they're interested in doing an [Exploring Scholar] project. More so than the Exploring Scholars Initiative is transforming somebody who might not feel empowered to become empowered.

Coming from a different angle, Lynn shared a different sentiment regarding the effects of the ESI transforming teachers: "It's [The Exploring Scholars Initiative] maintained a high morale for teachers because you get very much pigeonholed into a section and sometimes a school can forget you have this broad set of skills you can display when you do research in the school." However, as Simon realized, no matter why an educator chose to enter the PL program or the results of their individual passion project, the empowerment felt by all Exploring Scholars could have a profound effect:

Sometimes you get, during your [Exploring Scholar] project, PD, or whatever it is, you have a moment of inspiration and empowerment, and we all have that in our careers, don't we? It's that "This feels great" and "My god, I'm going to take this back and do great things with it!" And sometimes it happens, and sometimes it doesn't. You could argue philosophically and intellectually that even that moment of empowerment makes the process worthwhile because it just gives you that moment or moments going forward of "This is a great job" and "This is how I can improve." Even if the improvement is not connected intimately with the [Exploring Scholar] project, the PD, or whatever you've done, it might help you reflect and improve in all sorts of unforeseen and unknown ways.

The true empowerment of the ESI became evident when a project garnered recognition throughout the school community, leading to further research and adaptation beyond the initial efforts of individual teachers pursuing their passions. Audrey elaborated on this concept:

I find it absolutely invaluable when [AIS] actually uses the [Exploring Scholars Initiative]. I can point to things like standards-based grading, a schedule rewrite, and classroom furniture. A lot of these initiatives were first introduced by [Exploring Scholars], whether the teacher is here still or not, and then were eventually adopted across the whole school. Some eight or nine years ago, some a couple of years ago. I think it's a pretty unique way in which people can be involved in the direction of the school, but that takes sort of a two-way collaboration.

Past Exploring Scholar projects that had gained this kind of traction included but were not limited to Standards-Based Grading, Rethinking Study Hall, and Using Interactive Whiteboard in the Classroom. Elis reflected on the process of utilizing her Exploring Scholar project to enact change in the school's system as a whole:

For me, it [ES] was great because I was really uncomfortable with the specific topic that I chose. I was really uncomfortable with the program, with the status quo, that I was professionally responsible for implementing... [ES] was a really great experience of how to enact change. It was slower, but it was really effective. So instead of fighting the organization saying, "It's ridiculous. Why are we doing it?" It was much easier to say, "Oh, interesting. That's how you do it here. Let me look at that, hmm. I'm not sure if this is effective." Right? The first step was like measuring who's going on... Is that actually the intention? Then in the second phase, actually having an alternate [method]. Then pretty much all the other [staff implementing the program] in the organization saying, "Oh my gosh, we want to do that too." That was like a bit of an epiphany for me of how to create change within an organization.

Unfortunately, not all Alpine staff members experienced this level of empowerment.

The perspectives shared by various educators presented a sense of constrained teacher agency and apprehension toward expressing opinions within the educational setting beyond Exploring Scholars. Lynn articulated a significant distinction between her level of empowerment within ESI and general AIS systems, stating, "I think without the program, I would have been very pigeonholed into the classroom without the opportunity to be able to flex my creative muscles in any other direction." This sentiment might arise from the top-down leadership approach acknowledged by Simon, who observed, "It [Alpine Leadership] can tend towards top-down." Aria echoed this sentiment, highlighting the limitations imposed by top-down processes on school-wide decisions, asserting, "I think there are a lot of top-down decisions that are made, and there is not a lot of voice that teachers get in what's happening." Myles provided a concrete

example of the impact of this constrained agency, recounting a frustrating experience with direct leadership, stating:

I feel like I have my hands tied on that. I'm working with somebody and then my department head; they also have the same idea of high-stakes testing filling the content. So I had trouble with that. We had some discussions about that, but I don't think it went anywhere. So yeah, based on that experience, it's a little bit disappointing.

This lack of support for expressing opinions fostered a culture of fear rather than empowerment among some teachers at AIS. Erin vividly described this atmosphere, remarking, “There's no allegiance. They're [Leadership is] like, there's the door. So you can't complain. You can't.”

Similarly, Aria shared her apprehension, drawing from past interactions with the Alpine administration, “There's a lot of fear about expressing your opinions because people get fired...I mean, I've been told, ‘If I wanted to fire you, I could just do it. I don't need a reason to fire you.’”

These educators' narratives collectively illuminated a culture of constrained agency and fear surrounding the expression of opinions within the educational framework of AIS.

While educators' perspectives highlighted challenges they encountered in expressing opinions and feeling empowered within the educational environment, there were signs of a supportive culture regarding lifestyle choices outside the classroom. The empowered lifestyle was exemplified by leadership actively supporting staff engagement beyond school boundaries. Leadership acknowledged Alpine staff's individuality by fostering a community where teachers were encouraged to participate in local events and engage in activities outside the classroom. It empowered them to lead fulfilling lifestyles beyond the confines of work. For example, part of the benefits of working at AIS included a local ski pass that provided access to numerous ski resorts across the region. With just one pass, Alpine staff could explore various slopes, from



beginner-friendly runs to challenging terrain, and enjoy the stunning alpine landscapes. Additionally, the ski pass included access to other winter activities and amenities, allowing staff to fully experience the mountains surrounding AIS. In addition to enjoying the benefits of the ski pass, Alpine staff also took advantage of local venues by organizing a Thursday Ski Night. Through email invitations sent to Alpine staff and other locals affiliated with AIS (see Appendix F), this weekly activity offered Alpine staff an opportunity to expand their horizons and foster connections beyond the classroom. By participating in Ski Night, staff members could challenge themselves in new ways while building camaraderie and forming friendships among seasoned and newly arrived colleagues. This initiative promoted a sense of community within the staff and cultivated a supportive working environment where individuals were surrounded by peers and leaders who genuinely cared about each other's well-being.

### **A Mountain Hut Adventure**

The streets, already damp from a drizzle, reflected the glow of streetlamps when snowflakes joined the mix. Laughter filled the wind as clusters of teachers gathered at the trailhead for the evening's staff activity. A sense of camaraderie filled the stormy air as some participants embarked on their first-ever night hike, adding a mix of excitement to the winter weather expedition. Illuminated by the headlights of a few prepared staff members, the beaten trail guided both seasoned and novice hikers. As the path inclined, the wind howled, the snow pelted the hikers, and the groups naturally spread out. Some teachers, familiar with the trails, confidently guided their inexperienced peers, while others embraced the adventure on telemark skis. Prevailing over the blizzard-like conditions, the teachers forged ahead toward their destination—a mountain chalet promising warm food, an inviting ambiance, and libations to elevate the weekly grind.

The cabin's light shimmered beyond the last hill as they approached, surrounded by a halo of snowflakes. Upon opening the door, a wave of warmth embraced the snow-covered teachers, and the tantalizing aroma affirmed their triumphant arrival. Gradually, groups of teachers trickled in, granting the Alpine staff a reprieve from the weather. Each group, shedding the snow, found solace in the cozy atmosphere. As each novice teacher cautiously stepped into the inviting cabin, enveloped by the welcoming warmth within, a palpable sense of euphoria swept through the group, igniting a chorus of jubilant cheers and hearty congratulations. Amidst the gentle hum of the radiators adorned with soaking hats and gloves and the comforting embrace of the rustic interior, the collective triumph of conquering the arduous two-mile hike reverberated, filling the air with camaraderie and achievement. As each group arrived, more comforting drinks brought relief from the trek and infused the gathering with cheer. The mountain hut staff took charge, orchestrating the seating arrangement based on the teachers' pre-ordered meals. Once settled, plates adorned with warm meat, cheese, and potatoes graced the tables, creating a feast to be savored in the heart of the snowy mountain retreat.

After everyone had enjoyed a satisfying meal, a roll of raffle tickets and a cup circulated among the staff, ensuring each person present had their stub with the corresponding numbers in hand. Taking center stage, Tom, a male teacher dressed in ski boots, snow pants, and a thick wool sweater, assumed command. Expressing gratitude for everyone's attendance, he swiftly dimmed the lights. Around the corner, another teacher emerged, carrying a dessert from the mountain hut adorned with flickering candles. The other teacher made her way to Amanda, a female teacher leaning against one of the chalet's white-washed walls. The surprise etched across Amanda's face was palpable, and she instinctively covered her mouth with her hands. Everyone present burst into a lively rendition of "Happy Birthday." Amanda lowered her hands, revealing a

broad smile illuminated by candlelight. The vibrant performance of the song brought laughter to everyone, creating a joyous atmosphere that only deepened as Amanda blew out her candles.

Tom continued the show as he enthusiastically shared the prizes up for grabs: two bottles of wine from the school administration (cheers thanking the Dean of Academics sprinkled through the crowd) and a couple of hats representing local businesses and landmarks. Tom then called for volunteers with smaller hands to draw tickets from the cup. The first volunteer coincidentally selected his ticket, winning a bottle of wine. The second volunteer picked a ticket from the cup that belonged to a teacher at the same table, securing them the second bottle of wine. The final volunteer drew a ticket that happened to match the Drama teacher's number, granting her the last prize. The light teasing and inside jokes that permeated the entire group interaction were a testament to their genuine joy in each other's presence.

With contented bellies and lifted spirits, clusters of teachers readied themselves for the snow-laden journey homeward. Hats and gloves, warmed by the radiators, found their places on heads and hands, and coats, not quite dry, were buttoned up to battle the cold weather. Bittersweet farewells were given as the responsibility of teaching the next day took over. These groups descended the mountain path toward the school campus, mirroring the earlier ascent—scattered, guided by seasoned colleagues, and traversing the terrain on foot or skis. However, a notable transformation had occurred in both weather and spirit. A pristine quilt of snow now blanketed the trees, rocks, and trail, bestowing a serene ambiance. The wind had ceased its gusts, and the path, now gently leading downward, offered an effortless yet breathtaking journey homeward. The merriment of the dinner intertwined with the wonder of the beautiful alpine forest kept the Alpine staff closer together, building an even deeper connection between the teachers.

The ESI at AIS contributed to collective teacher efficacy by empowering educators with increased autonomy and influence in their professional capacities, enabling them to shape instructional practices and student learning experiences. Teachers expressed a strong sense of autonomy within their classrooms, reflecting on the freedom they experience to innovate and adapt their teaching methods. Additionally, professional development programs like the Initial Scholars Program and Exploring Scholars provided support while allowing teachers to pursue personal passion projects and engage in rigorous research endeavors. This empowerment was further evidenced by projects initiated by Exploring Scholars that gained recognition and led to further innovation across the school community. Ultimately, the program fostered a culture of collaboration, innovation, and continuous improvement among educators at AIS.

### **Supportive Leadership**

The greatest leader is not necessarily the one who does the greatest things. He is the one that gets the people to do the greatest things.

—Ronald Reagan

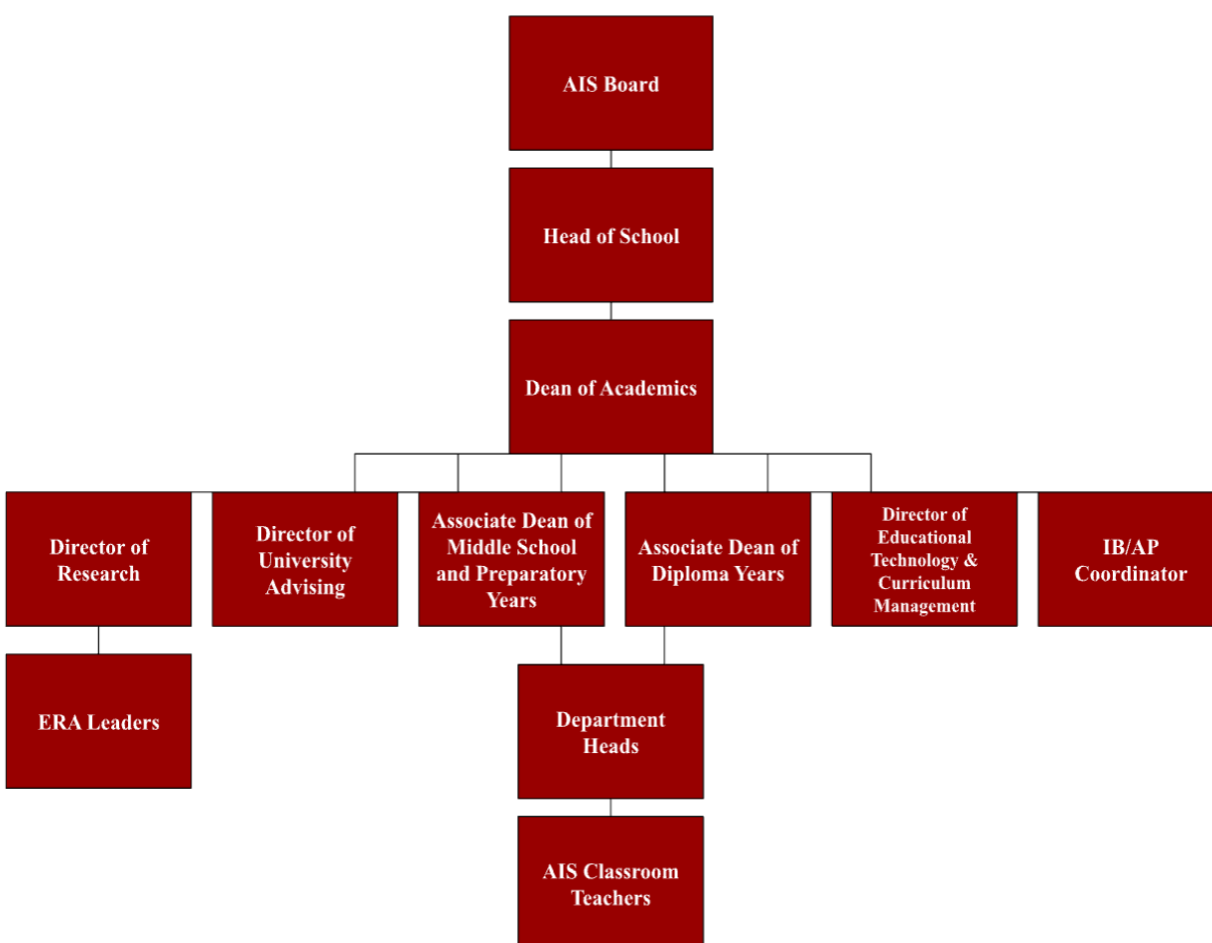
### **Introduction**

Supportive leadership is characterized by school leaders prioritizing protecting staff from unnecessary tasks and distractions while acknowledging and celebrating staff achievements (Donohoo et al., 2020). This leadership style contributes to establishing a positive and collaborative school culture where educators feel appreciated, empowered, and motivated to enhance their teaching practices (Hallinger, 2011). Audrey recognized the need for supportive leadership: “I feel like it’s really important for people, in order to be the best versions of themselves here, that they feel that they’re going to be supported.” The leadership framework at AIS surpassed typical American public high schools due to the additional systems and structures necessary for a boarding school environment. The AIS designated the Senior Academic Team as

the administrative body overseeing educators directly engaged in academic instruction with students. The researcher developed Figure 6 to illustrate the hierarchical structure above and below this Senior Academic Team, clarifying the individuals involved in leading Alpine educators.

**Figure 6**

*Leadership Structure at Alpine International School*



## **Relationships Through Feedback**

Seated at the dining room table, Erin found solace in the soft hum of her TV playing in the background. Elbows gently sitting on a vibrant red placemat, she cradled a steaming cup of tea in her hands with a plate of delectable breakfast pastries by her side. Surveying the cozy surroundings, the tiny sink stood devoid of dishes, an array of worldly knick-knacks adorned the walls, and a bowl filled with cafeteria fruits graced the counter. The warmth inside starkly contrasted with the frosty mountain scene framed by the window behind Erin.

For the initial 10 minutes, Erin shared a mosaic of personal and professional experiences that intricately woven together the tapestry of her life at AIS over the past couple of years. When asked about leadership styles at AIS, Erin set aside her cup and provided a broad overview, employing phrases like “very hands-off,” “knows I am a professional,” and “not a micromanager.” However, her emotional depth surged when she delved into specifics about a particular administrator. Her voice trembled, and tears welled in her eyes as she expressed,

You really want to work for them because they see what you're actually doing. Even the comment they made to me about my student/family feedback and how I see the kids was so flattering that I was like, “Wow, you appreciate me.” And I really need that once in a while.

The impact of this administrator on Erin's perspective became even more palpable throughout the conversation. Erin's emotional spectrum oscillated from excitement to apprehension to anger and back as questions continued to probe her experiences with common goals, embedded reflection, cohesive teacher knowledge, and empowered teachers. She reached an excited high when the administrator's influence was revisited as Erin spoke to the same specific comment concerning reflection. With her MacBook Pro open on the table, Erin used the

cursor to highlight a specific block of text from her evaluation last school year, “Read, just read this comment. That is an admin comment that you would die for.” Silently waiting for 30 seconds, she sat up straighter, holding her head high to emphasize, “Isn't that so flattering?” They saw me, they saw that there's [student] work on the walls, they saw that there's kids I'm tailoring to. And that is not just complimentary, but seeing what I do, actually seeing what I do.

### **The Pendulum of Alpine Leadership**

In delving into Alpine's leadership dynamics, one might liken it to a pendulum swinging between two distinct states. On one side was the perception of clarity, accessibility, and a supportive environment valuing educator input at all levels. Conversely, the viewpoints expressed by Alpine educators revealed a contrasting picture: challenges such as a perceived lack of acknowledgment for staff efforts, inadequate administrative support, and a disconnect between leadership decisions and the daily classroom realities.

### ***Supportive Side***

Alpine educators perceived their leaders as supportive or not supportive in various ways. Todd described his direct leaders as highly supportive as they had earned the trust and respect of everyone within his local learning community: “They’re both super supportive. I feel they command the trust and respect of everyone.” Neil felt his direct leaders trusted teachers in return through the freedom they were given by lack of a top-down approach: “people have a lot of autonomy, and you know, I think they’re trusted. The school doesn’t really take the top-down approach of you have to do this.” Many teachers appreciated this autonomy, feeling empowered to decide and pursue teaching methods independently. Cem appreciated the freedom to design his learning modules and explore different approaches without micromanagement. He felt supported by the fact his leaders trusted him to navigate his teaching responsibilities

independently despite his limited experience: “They ask me, what are you up to this semester? What are the different sorts of learning modules that you're trying to hit? But once I cover my bases, they let me do whatever I want, which, to me, feels very supportive given that I'm not super experienced.”

This autonomy fostered a sense of trust and respect as leaders refrained from controlling their work, instead trusting their professionalism. Erin also valued her leader's hands-off approach, recognizing that they respected her expertise: “He is very hands-off. He knows that I'm a professional. He's not a micro-manager.” Additionally, the teachers felt supported by their leaders' awareness and involvement in the school community.

They noted the leaders were attentive to both teacher and student needs, actively addressing issues and providing helpful strategies for improvement. Neil's experience with his direct supervisor illustrated this type of leadership:

I've never felt like there's something going on or a student who's obviously struggling or having an issue that my campus head is unaware of. They definitely know because they're here, and they're involved. They know what's going on. And so it's generally not a surprise if I go and talk to them about a student or about an issue, they're aware of it... and there's always helpful conversations about strategies to address issues.

This supportive leadership style created an environment where teachers felt valued, respected, and motivated to excel.

Multiple layers and accessibility characterized the leadership structure at AIS. Educators like Neil described a hierarchical arrangement with various levels of leadership, from department heads to campus supervisors to school deans: “There's a lot of levels, I would say. There's so many things going on at the school that necessarily there's a lot of people in leadership



positions.” Despite this layered structure, there was a sense of openness and accessibility among leaders, with individuals being readily available to address concerns or provide support when needed. Neil also highlighted the school's practice of clearly communicating the leadership hierarchy through annual updates and presentations, ensuring transparency and understanding among staff members:

One thing that happens every year that I do think is communicated clearly is the leadership structure. They [leadership] show us charts, and, you know, the Head of School will have a “State of the School” just letting us know this is what we've been focusing on, where we're going to focus.

Additionally, teachers appreciated the regular visits and feedback from department heads and some school administration, recognizing their supportive approach in acknowledging efforts and offering guidance. Cem emphasized the supportive nature of leadership, noting their positive feedback and willingness to assist, especially in addressing potential issues: “Typically only positive, their feedback, is still very helpful in that I get the feeling that they’re looking out or glaring errors, but absent those, they’re sort of super supportive of your efforts in general.” Audrey underscored the importance of teachers' firsthand experience in shaping educational practices, suggesting a collaborative approach to leadership where those directly involved in teaching played a significant role in decision-making and improvement initiatives. These insights created a picture that the leadership structure at AIS was marked by clarity, accessibility, and a supportive environment that valued input from educators at all levels.

### ***Not Always a Positive***

Some perceived the leadership at AIS to have shortcomings in certain areas including a perceived lack of value and recognition for staff contributions, insufficient support from

administrators, and a disconnect between leadership and the realities of classroom experiences. Aria expressed disappointment in the lack of value placed on staff members by the administration, indicating that despite efforts to contribute positively, their input was often disregarded: “It’s not a place, I think, where people feel valued by the administration, which is really sad because there are some great people here who are trying to do good things, but their input isn’t really taken into account by the administration.” Aria’s thoughts suggested a failure to recognize and appreciate the contributions of faculty members, leading to a sense of disconnection and undervaluation among staff. Myles echoed this sentiment: “I don’t feel supported because I don’t see them.” He expressed a lack of support from the leadership, indicating a need for more visible and active involvement from administrators to address the broader concerns of the staff.

Nakoa further emphasized the disconnect between administrators and the classroom reality, suggesting a gap in understanding teachers' day-to-day challenges and needs: “I don’t think administrators really know what’s going on in classrooms very well.” Overall, Alpine leadership might fall short in fostering a supportive and inclusive environment for its staff. Neil's observation suggested the leadership might be grappling with numerous unseen challenges, potentially leading to gaps in communication and understanding between leadership and staff: “I just think there's so many things going on with the school, so many different considerations for the leadership team, that I'm sure they have their hands on lots of things that need to be dealt with that, we just don't know about.” Neil’s perspective underscored the complexity of leadership duties, suggesting the administration faced unseen challenges affecting their ability to fully address staff concerns and effectively communicate with them. The viewpoints expressed by Alpine educators highlighted notable challenges within the leadership framework such as a

perceived lack of acknowledgment for staff efforts, inadequate support from administrators, and a disconnect between leadership decisions and the actual classroom dynamics.

### **Alpine Leadership Versus Educational Research Leadership**

While the Director of Research was also considered administration, Lynn and Elis shed light on the dynamic between Alpine's leadership and the ESI. While Lynn acknowledged the presence of supportive leadership within the ERA structure, she suggested a missed opportunity for broader recognition and encouragement of the empowerment fostered by participation in the ESI:

I think within [ERA], there is supportive leadership, but without [ERA], like external to that, they're missing a trick. They really are. Like the empowerment that doing [Exploring Scholar] gives you isn't praised by the [AIS] leadership as much as it really could be. It could be more supported, acknowledged, and praised.

Elis contrasted AIS with other schools, indicating schools have a preconceived idea of what success looks like, creating a dissonance between what the teachers and staff view as success and what the leadership views as success: "I think it [Exploring Scholars leadership] sort of stands apart actually because I think most schools including this one already have a picture of what an outcome is going to look like." These insights reflected the potential alignment or incongruity between Alpine's leadership ethos and the leadership philosophy guiding the ESI.

### **Exploring Scholars Leadership**

The Director of Research oversees all professional learning programs provided to Alpine educators through ERA, encompassing the ESI. However, the mentorship of Exploring Scholars involves all ERA leaders working together including the Director of Research. Therefore, the ERA leaders guiding the path for Exploring Scholars include the Director of Research, a current

Department Head, and two Alpine educators. One educator teaches full-time, while the other teaches part-time. The Director of Research initiated the ESI and the other ERA leaders developed their leadership styles under his guidance, embracing a similar approach. Therefore, regardless of the ERA leader with whom an Exploring Scholar collaborated, they could expect consistent interactions.

Hands-off was used to describe Alpine leadership and was utilized again by Enna to describe the leadership found within the ESI: “It’s very hands-off, which is good. Just like quick check-ins and again, like I said, they’re always there if you need it.” The leaders of ESI were characterized as highly supportive and adaptable, prioritizing active listening and empowering participants to take ownership of their initiatives. Yagna shared his work with ESI’s attentive and open-minded leaders: “At no point I’ve ever seen them prescribing anything. It’s more about listening to us and saying, OK, this is good. What is next? And what do you think will be the outcome? It’s more like a guiding thing.” The leaders refrained from dictating actions and instead focused on facilitating discussions and guiding scholars in determining their next steps and anticipated outcomes. Myles described ERA leaders, sharing that he felt “very supported in ERA as they do the checkup on you and say, ‘How are you doing? Do you need any help?’” The Exploring Scholars Initiative’s leadership embodied a hands-off yet supportive and inquiry-based stance as Neil’s characterization noted, “very supportive, very adaptable, very inquiry-based,” fostering an environment where Scholars were empowered to drive their projects.

Yagna noted that the ERA leaders consistently inquired about support, which had been instrumental in boosting his confidence and fostering an understanding that he could seek assistance whenever needed:

Constant question that always comes up from [ERA leaders] are, “Do you need any support? Do you need any resources?” I think when they ask this question every time, it sort of gives us the strength to know that, okay, at this point, I don't have any need for any resource or anything. But if I need it, I know that I can just go back to them, write an email, and then I will get what I want.

Myles also viewed the continual inquiries about support as an invitation to seek assistance when necessary, stating, “They do the checkup on you, ‘How are you doing? Do you need any help?’ And for example, [the Director], I call, I share work with him, and he gives comments all the time, so that’s very helpful.” Maeve further described the Director of Research as highly responsive and deeply engaged, connecting this ongoing willingness to assist with the Director’s constant interest in the ideas of Exploring Scholars, sharing, “I find [the Director] to be really supportive. Pretty much like anything that I’ve been interested in, he’s like, ‘That sounds amazing, go for it!’” Nakoa recalled the Director’s readiness to help, noting the Director’s follow-through on promises, which aligned with Maeve’s description of engagement:

He is also the type that will do something like, “Oh, if you want to go see this person speak, I’ll cover your classes that day,” or something like that, and he meant it. You know there isn’t a lot of administrators [who] will say things like that, but he would be like writing you later and be like, “When was that class that you wanted me to cover?”

The consistent support and encouragement provided by the ERA leaders, especially the Director of Research, instilled confidence in the Exploring Scholars, reassuring them that help was readily available whenever needed.

The Director of Research and driving force behind the Exploring Scholars Initiative was identified as highly supportive and regarded as an exceptional connector. Many participants like

Christophe echoed this sentiment, “I think the Director, obviously, in my opinion, is an amazing connector, you know? And I think that’s one of his tremendous strengths.” His ability to facilitate connections within the Alpine community and beyond its borders was recognized as a significant strength. Through his networking skills and strategic approach, the Director was pivotal in fostering collaboration and knowledge exchange among scholars and educators within and outside of AIS.

### **Global Interactions Made Possible**

The Director’s office exuded emotional comfort, filled with well-loved furniture covered in sentimental nicknacks such as family photos, gifted art, meaningful books, and framed awards. Plush wingback chairs and thick rugs cushioning the floor brought physical comfort, inviting the occupants to further relax in the office space. Sunlight streamed through large windows framed by flourishing plants, infusing the space with another layer of tranquility. Amidst this serene backdrop, lively conversation filled the air as the newest Global Scholar and the Director of ERA animatedly prepared for their presentation, their laughter echoing off the walls.

Deciding to sit side by side at the sturdy table typically set up as a desk, they arranged their computers, eager to dive into the upcoming discussion. As the Director and Global Scholar set their computers up, both opened the Zoom link that had been broadcast worldwide. Soon, they were greeted by a familiar face—Nick, a former Alpine teacher and past Exploring Scholar, who had joined to assist with the presentation. Amidst warm smiles and enthusiastic greetings, introductions were made, and the Director seamlessly transitioned the conversation from ‘catching up’ to the Global Scholar and Nick connecting about their mutual interests as

educators. The conversation was animated as Nick and the Global Scholars shared their experiences at AIS, which set the tone for discussion as the audience started to join the link.

As the first attendee joined from Australia, followed by others from various corners of the globe including the United States, Switzerland, Kenya, Poland, England, Colombia, Spain, China, Germany, and India, the Director extended warm welcomes to each participant, acknowledging their presence and expressing gratitude for their involvement in the pilot Online ERA Talk. When Global Scholars grace the halls of AIS, it is customary for them to engage in informal brown-bag presentations, extending an open invitation to all Alpine staff. Recognizing the opportunity to amplify this experience, the Director, spurred by low attendance, envisioned an online platform to broaden the audience and foster deeper connections among impassioned educators. As the virtual audience grew more diverse, with each attendee logging in from different corners of the globe, the Director could not help but feel a swell of pride.

With the room abuzz with anticipation, Nick took the floor to introduce himself and the Global Scholar, setting the stage for an engaging and enlightening presentation. Engrossed in the five-minute presentation delivered by the Global Scholar, each listener added to the tapestry of connections being woven in real-time. As the floor opened for questions, Nick, ever prepared, had questions ready to ensure the conversation flowed seamlessly. However, it was a testament to the scholars' passion that only twice did his notes need to be referenced, as educators from around the world engaged in spirited discussions about self-directed professional development. The Director deftly navigated the conversation, giving the Global Scholar ample space to share their insights while adding his unique perspective when needed. In this exchange of ideas, not only was knowledge disseminated to every corner of the globe, but the expertise and passion of the Global Scholar were also honored and celebrated. It was a stage set not just to share

knowledge and make connections but also to proudly showcase the remarkable work of another human being. This driving force echoed the ethos of the Exploring Scholars Initiative.

As the clock ticked past the 30-minute mark, signaling the end of the lively discussion, attendees reluctantly began bidding their farewells. In the fast-paced world of education, time is a precious commodity, felt keenly by educators worldwide. Nevertheless, even as some audience members dispersed, eager to attend to their myriad responsibilities, others lingered behind, drawn to the intimate setting of a small group conversation. Meanwhile, latecomers hurriedly joined the fray, eager to catch even a snippet of the unfolding enlightening discourse. Amidst this flurry of activity, there was a palpable sense of joy and satisfaction in the air. As the last goodbye was exchanged and the room emptied, the Global Scholar let out a contented sigh, their shoulders relaxing as a smile graced their lips. They had just forged connections with educators from around the globe—an audience they had never dared to imagine reaching. It was all made possible by the Director, whose tireless efforts had brought together this diverse and dynamic gathering centered on growing as learners.

### **Connections to Collaborate**

The Director's commitment to connections seeped into all the professional learning programs ERA runs including the Initial Scholar Program, the Exploring Scholars Initiative, and the Global Scholars Exchange. On Wednesday, January 17, an ERA leader kicked off the Initial Scholar Program for the newest Alpine teachers. While guiding teachers to form groups based on their interests, the facilitator did not guide the new teachers to other resources but instead encouraged them to reach out to Alpine experts. Supporting this effort, the Initial Scholar Handbook (see Appendix E) stated:



Twice during the six-week program, you are asked to observe a colleague....Often, as teachers, we are so busy with our classes that we have very little chance to observe and learn from our colleagues. This is unfortunate since our colleagues in the rooms right next door to us have experiences and ideas that would be very helpful to us ... if we just had time to observe them in action. Since our opportunities to observe our colleagues are relatively limited, it is important that we get as much out of each opportunity as possible.

Past and current Exploring Scholars highlighted the pivotal role played by the Director and other ERA leaders in facilitating connections that supported their passion projects. Elis, for instance, recounted how she was paired with another Alpine educator, who proved instrumental in fostering reflective practice and advancing her project: "I think working with [the co-author] the second year was really good for the reflective practice, and again, the Director really pushed me to do that." Similarly, Todd benefited from the connections forged by ERA leaders, particularly in his collaboration with a visiting Global Scholar, who offered invaluable insights into research methods: "We had another Global Scholar. She was actually really into research methods. We sat down, and she gave me some tips on how to ask the students questions...and she advised me to also do interviews, which are gonna happen later this month." The Director's emphasis on fostering connections permeated all ERA PL programs, encouraging collaboration and resource-sharing among educators.

The ESI contributed to the development of collective teacher efficacy by fostering a supportive and inquiry-based leadership approach. This approach, characterized by active listening, making connections, and empowerment, enabled Exploring Scholars to drive their projects forward while receiving guidance and support from program leaders. This hands-off yet supportive stance allowed teachers to take ownership of their initiatives and collaboratively

determine their next steps and anticipated outcomes, ultimately enhancing their sense of collective efficacy and professional growth.

The Exploring Scholars Initiative at AIS contributed to the development of collective teacher efficacy by addressing several key factors. It fostered cohesive teacher knowledge by promoting collaboration, knowledge sharing, and a culture of learning among educators. Additionally, the program empowered teachers with increased autonomy and influence in their professional capacities, allowing them to shape instructional practices and student learning experiences. Embedded reflective practices were nurtured through structured opportunities for self-reflection, collaborative dialogue to improve instructional practices, and examination of student evidence and feedback. Furthermore, the program promoted goal consensus by uniting teachers in their commitment to learning, enhancing their collective efficacy and collaborative efforts. Lastly, the Exploring Scholars Initiative fostered a supportive leadership approach characterized by active listening, providing connections, and educator-envisioned success, enabling participants to drive their projects forward while receiving guidance and support from program leaders. These components contributed to a culture of collaboration, innovation, and continuous improvement among educators, ultimately enriching the academic environment and enhancing collective teacher efficacy.

### **Final Reflection**

When someone tells me “no,” it doesn’t mean I can’t do it, it simply means I can’t do it with them.

—Karen E. Quinones Miller

The Exploring Scholars Initiative at Alpine International School is more than just a professional development opportunity; it is a testament to the continuous growth and self-improvement methods embedded within the school’s culture. This unique program serves as a

learning environment that celebrates individuals with the motivation and drive to push themselves beyond their comfort zone. As Maddox pointed out, is the program empowering people, or are the people choosing to go into the program already empowered?

More realistically, it's probably the effect of they're [Exploring Scholars] that way [empowered] to begin with, and that's why they're interested in doing an Exploring Scholar project. More so than the [Exploring Scholars Initiative] is transforming somebody who might not feel empowered to become empowered.

Through the educators' experiences, it became evident that the Exploring Scholars were already predisposed to pushing themselves and continuously striving for growth regardless of whether they were in the ESI. Todd demonstrated this characteristic as he started his passion project before the ESI panel even accepted it: "So I asked him [the Director] last Christmas about it [the Exploring Scholars Initiative]. We sat down and basically started working last Christmas on my project, even though I technically didn't start until this September." Todd's experience showcased a self-driven approach to growth and improvement. This eagerness to begin work ahead of schedule indicated a commitment to personal and professional development.

Furthermore, the resilience and determination exhibited by Neil in resubmitting a proposal after receiving feedback also highlighted the program's role in fostering a culture of perseverance and continuous improvement: "I put in a proposal in my first-year teaching for my second year, but it [the feedback] was that year I also struggled a bit with pacing, and so the feedback was like definitely it's [my passion project] a good idea, but maybe after another year. So, I resubmitted my proposal last year." Neil pursued his goals despite initial setbacks, indicating a deep-seated commitment to personal and professional growth.

Lynn admitted the opportunity to grow as an educator with the ESI attracted her to teach at AIS in the first place: “It [the Exploring Scholars Initiative] was one thing that attracted me to this school originally.” Her observations went deeper in recognizing there was a particular group of educators already predisposed to pushing themselves beyond their comfort zone: “I think there is a bit of a cohort that accepts these projects, and then there's some that just never get engaged at all and don't involve themselves in it at all.” Myles built on this idea when referring to empowerment from the ES: “And like-minded people, I could share my work and get feedback. That's really important. I mean, as an educator, you can't be isolated at all. You need to spread the wings and talk to people to get ideas.” Myles' thoughts highlighted how the ESI created a group of similarly inclined individuals to collaborate and share ideas.

Yagna pointed out this shared motivation came from being academically inclined: “I think to do well in a program like this, you have to also be an academically inclined teacher.” The ESI served as a beacon for those who aspired to continuously elevate their craft and contribute to a culture of ongoing learning and development. So, did the Exploring Scholars Initiative help Alpine staff grow? Simon reflected on the PL program as a whole:

How does that help them to grow and develop personally and professionally? In some ways, I can't measure that because it's their take away from it. I suppose you could say that they utilize the things they've learned from that and put it into their classroom. But realistically, I think that's not very visible. At its worst, it [their passion project] would be a half-hearted project with no measurable outcome. I think that's rare. I need to be fair. I think that occasionally happens because that always happens in life, doesn't it? You know, some people don't put their hands on to it. The normal outcome, I think, would be there's a useful, interesting project that somebody achieves. They present at the end, and

whether they use that significantly in their future practice is debatable. Then there'll be a few people on the project who do it and finish it, are really enthused and empowered by it, and use it significantly in their classroom afterward. That's the very best example of how the project works.

While the ESI helped Alpine staff grow when they wanted to, it also fostered cohesive teacher knowledge, empowered professional growth, and nurtured deep reflective practices. However, the ESI's true power lay in its voluntary nature. Unlike mandatory programs, the ESI was designed to cater to the needs of Alpine educators seeking additional opportunities for growth and development. This voluntary aspect preserved the program's spirit of exploration and self-directed learning and fueled intrinsic motivation and creativity among participants. Mandating participation would stifle the innate curiosity that drives growth and limits the program's ability to cultivate a culture of genuine enthusiasm and engagement among educators. Thus, the voluntary nature of the ESI was not merely a logistical detail but a fundamental principle that underpinned its effectiveness and success.

### **Summary**

Teachers' experiences with the Exploring Scholars Initiative at Alpine International School closely aligned with AIS's measure of collective teacher efficacy. Participation in the program was correlated to enhanced collective teacher efficacy as indicated by both quantitative assessments and supported by qualitative observations. Scholars engaged in the program demonstrated elevated scores across various dimensions of collective teacher efficacy such as group competence, instructional strategies, student discipline, cohesive teacher knowledge, common goals, and supportive leadership. This correlation underscored the ESI's effectiveness

in boosting educators' confidence and competence in their teaching practices, thereby contributing to ESI's overall educational excellence.

The Exploring Scholars Initiative might contribute to developing collective teacher efficacy by addressing key factors essential to its enhancement. Firstly, the ESI fostered goal consensus among educators by promoting collaboration, aligning individual goals with the school's mission, and encouraging continuous learning. Educators worked together through collaborative projects and initiatives to achieve common objectives, thus enhancing collective teacher efficacy. Secondly, the ESI promoted cohesive teacher knowledge by facilitating collaboration and continuous learning among educators, specifically emphasizing knowledge sharing. Educators developed a shared understanding and expertise by sharing best practices, experiences, and insights, further strengthening collective teacher efficacy. Thirdly, while reflection was already ingrained in Alpine's culture, the ESI provided a structured framework for intentional reflection around educators' passion projects. This deliberate reflection fostered deeper insights, learning, and growth, enhancing collective teacher efficacy. Fourthly, the ESI empowered teachers by encouraging investment in their education and providing opportunities for autonomy in pursuing their passion projects. By empowering educators to take ownership of their professional growth and development, the ESI enhanced their sense of efficacy and effectiveness in their teaching practices. Finally, the supportive leadership within the ESI offered guidance and enabled educators to drive their initiatives forward. This supportive environment empowered educators to innovate, collaborate, and lead, further bolstering collective teacher efficacy.

Ultimately, the voluntary nature of the ESI was fundamental to its success, preserving a culture of exploration, self-directed learning, and genuine enthusiasm among educators.

Mandating participation would stifle intrinsic motivation and creativity, limiting the program's effectiveness in fostering collective teacher efficacy and enhancing educational outcomes at AIS.

Chapter V addresses the thematics, evaluations, and implications bridging theory and practice regarding the relationship between effective PL and CTE. These connections found within the enabling factors of CTE are used to respond to the two research questions that framed this study:

- Q1 How do AIS teachers' experiences with the Exploring Scholars Initiative relate to their measure of collective teacher efficacy?
- Q2 How does the Exploring Scholars Initiative support the five factors of fostering collective teacher efficacy: empowered teachers, embedded reflective practices, cohesive teacher knowledge, goal consensus, and supportive leadership?

This synthesis of the findings and theoretical-practical connections captured in-house professional learning practices needed to create a program that increased collective teacher efficacy beliefs among educators.

CHAPTER V  
THEMATICS, EVALUATIONS, AND IMPLICATIONS

**Overview of the Study**

The purpose of this study was to interpret and evaluate how a specific model of professional learning (PL) cultivated collective teacher efficacy (CTE) through the identified enabling factors. Exploring innovative teaching methodologies and their impact on student learning is a significant focus in educational research. As demonstrated by numerous studies over the past two decades, CTE played a crucial role in shaping educational outcomes. Bandura's (1977) theory identified four sources contributing to the formation of collective efficacy: mastery experiences, vicarious experiences, verbal persuasion, and affective states (Donohoo, 2018; Goddard & Goddard, 2001). These sources were connected to malleable factors within the school environment and leadership including empowered teachers, embedded reflective practices, cohesive teacher knowledge, goal consensus, and supportive leadership. Effective professional development also played a vital role in enhancing teacher practices and student outcomes with seven essential features identified to maximize its impact. Despite advancements, there remained a gap in understanding how effective professional learning structures could nurture and enhance CTE. The Exploring Scholars Initiative (ESI) at the Alpine International School (AIS) offered an inquiry-based approach to professional learning, which could bridge this gap by fostering collaboration between researchers and practitioners. This study explored the ESI as a practical approach to fostering collective teacher efficacy.



The AIS is celebrated for delivering an experiential American-style education to an international student body and is committed to continuous improvement. The AIS offers educators a rigorous curriculum and support through in-house professional learning programs through Educational Research at AIS (ERA). The ESI stood out among ERA's programs, allowing AIS staff to execute year-long passion projects fostering ongoing professional learning and collaboration. The popularity of ESI among AIS staff underscored its effectiveness in enhancing teaching practices and contributing to academic excellence. Therefore, studying ESI as a professional learning initiative could provide insights into how established school structures impacted collective teacher efficacy. This research aimed to bridge theory and practice regarding the relationship between effective teacher PL and CTE.

There is a solid theoretical connection between the two. Still, practical implementation is needed to establish a 'theory of action,' moving beyond measuring CTE into a malleable concept for PL (Loughland & Nguyen, 2020). Both CTE and effective PL share common principles and lead to improved student outcomes. However, further research is needed to understand the practical aspects of this collaboration within PL. Core features of effective PL including collaboration, focus on current practice, integration of theory and practice, and continuous evaluation measures provide a framework for designing and evaluating PL programs. To address these gaps, this research investigated how teachers' experiences with the Exploring Scholars Initiative related to the school's collective teacher efficacy and how the program supported factors essential for fostering collective teacher efficacy such as empowered teachers, embedded reflective practices, cohesive teacher knowledge, goal consensus, and supportive leadership.

Two research questions framing this study were addressed:

- Q1 How do AIS teachers' experiences with the Exploring Scholars Initiative relate to their measure of collective teacher efficacy?

Q2 How does the Exploring Scholars Initiative support the five factors of fostering collective teacher efficacy: empowered teachers, embedded reflective practices, cohesive teacher knowledge, goal consensus, and supportive leadership?

The qualitative research method utilized in this study was Elliot Eisner's (Flinders & Eisner, 1994) educational criticism approach. This method encompassed two interconnected concepts: connoisseurship, which involved appreciating the nuances and qualities of a subject, and criticism, which involved revealing insights and interpretations (Flinders & Eisner, 1994). In applying this method, the researcher leveraged their expertise in in-house professional learning to analyze and interpret the learning environment within the ESI. The 'instructional arc' framework was utilized to examine the curriculum implemented in the ESI (Uhrmacher et al., 2016). This framework focused on three aspects of the curriculum (the intended, operational, and received) by answering three key questions: what the leadership planned or desired to happen, what actually happened, and what educators learned or took away from the experience (Uhrmacher et al., 2016). By employing this lens, the study appreciated and interpreted how the beliefs and intentions of AIS leadership shaped the educational experiences received by teachers and staff while also exploring other elements such as the null and hidden curriculum. These questions, including administration intentions in the learning environment for a professional learning program, identified how teachers' experiences related to the measure of collective teacher efficacy.

### **Discussion of Effective Professional Learning**

The ESI at AIS provided Alpine staff a unique opportunity to delve deeply into educational issues within their school context, enhancing their professional development experiences and enriching the academic environment for all Alpine staff and students. Darling-Hammond et al. (2017) outlined seven key features of professional learning essential for

maximizing its impact, all of which were integrated into the ESI. These components encompassed content relevance, active learning methodologies, collaborative engagement, modeling of effective practices, provision of coaching and expert guidance, integration of feedback and reflective practices, and sustained duration of engagement (Darling-Hammond et al., 2017). Throughout the ESI, these elements were woven into each scholar's learning journey, ensuring a comprehensive and impactful professional development experience.

The ESI process was initiated by Alpine staff conceptualizing ways to enhance student learning within AIS's school community. They were guided to collaborate with an ERA leader to refine their ideas and align them with the school's vision and mission, transforming them into fully developed passion projects. By completing an application detailing their passion project including planned collaboration and anticipated impact on student learning, Alpine staff ensured their projects were content-focused and directly contributed to improving teaching and learning outcomes.

Once the application deadline had been reached, a panel of Alpine leaders reviewed each application, selecting up to eight projects that best aligned with the school's goals and had the potential to become school-wide initiatives. This initial step ensured the ESI projects remained connected to content and directly addressed the school's educational priorities. Now recognized as Exploring Scholars, educators participated in an informal meeting to establish rapport with ERA leaders and fellow scholars, fostering a supportive learning community. This collaborative environment reflected the importance of collaboration, a key component of effective professional development.

After the initial meet and greet, Scholars chose a date in the upcoming Spring to host their ERA Learning Session. This date was then utilized to plan backward, prompting Scholars to

select other dates and times to meet individually with ERA leaders throughout the year. This sustained engagement over the academic year ensured that Scholars received ongoing support and guidance as they navigated their passion projects, contributing to the program's sustained duration and fostering growth and learning. As more informal meetings occurred, they became individualized opportunities for Scholars to reflect on their progress, identify challenges, and determine the next steps on their project, thus incorporating feedback, reflection, and active learning strategies, essential elements of effective professional development.

As the ERA leaders utilized check-ins to collaborate and learn with each Scholar, they played a crucial role in connecting scholars with experts within and outside of AIS. These connections created another layer of collaboration, enriching the learning experience and providing modeling of effective practices. This coaching and guidance further enhanced scholars' understanding of their projects' content and processes, promoting continuous growth and learning.

Finally, scholars shared their learning and insights from the ESI in their scheduled ERA Learning Sessions, disseminating knowledge to their peers and contributing to a collaborative learning and innovation culture at AIS. This process highlighted the impact of the ESI on individual educators. It served as a model for effective professional learning within the broader educational community, aligning with the principles of effective professional development outlined by Darling-Hammond et al. (2017).

The Exploring Scholars Initiative at AIS exemplified effective professional learning practices by aligning with the principles of content-focused, active learning, collaboration, modeling, coaching, feedback, and sustained duration. By incorporating these elements into its

program structure, the ESI contributed to continuous growth and development among educators, ultimately leading to improved teaching practices and enhanced student outcomes.

### **Discussion of Enabling Factors of Collective Teacher Efficacy**

Investigating the Exploring Scholars Initiative unveiled a nuanced understanding of how the proximate sources of collective teacher efficacy were cultivated in a professional learning program, bridging theoretical insights with practical implementation. How the ESI influenced collective teacher efficacy was discerned by evaluating each provisional theme: Goal Consensus, Collective Teacher Knowledge, Supportive Leadership, Embedded Reflective Practices, and Empowered Teachers.

#### **Goal Consensus**

The AIS educators who had experience within ESI reported a higher perception of goal consensus among all educators through collaborative goal-setting and palpable accountability. This PL program supported educators in aligning their professional growth with the school's vision and mission, emphasizing continuous learning and meaningful contributions to the educational community. The ESI cultivated a culture of exploration and growth by encouraging teachers to pursue their interests through passion projects and providing guidance. Collaboration in setting goals was evident as the ERA Exploring Scholars Application process required interaction with ERA leaders to outline projects collaboratively. This collaborative approach enhanced collective efficacy by ensuring that each educator understood their role in achieving broader school goals. Additionally, the ESI created a palpable sense of accountability among participants, encouraging them to prioritize project objectives beyond individual evaluations. The structured support system provided by the ERA leaders, combined with the autonomy granted to educators, ensured ongoing guidance and facilitated effective learning and reflection. Overall,

the ESI aligned educators' goals with the school's mission and provided a dedicated space for learning and growth, ultimately enhancing collective teacher efficacy.

### **Collaborative Goal Setting**

The ESI was structured to nurture educators' professional growth in alignment with the school's vision and mission. The ERA defined the PL program's intent as providing support for innovative and motivated educators to delve deeply into educational issues within the school context, enhancing professional development experiences while enriching the academic environment. This goal resonated with AIS staff who perceived the ESI as a means to support continuous learning, encourage lifelong curiosity, and contribute meaningfully to the educational community. Through the program, AIS staff were encouraged to pursue their interests with guidance on a passion project, fostering a culture of exploration and growth. Levi's thoughts simply stated that the goal of the ESI was "to help people realize that they are the ones that have to be in charge of their own growth." Neil's perspective underscored the program's emphasis on lifelong learning: "If lifelong learning is truly one of our cornerstones, then we need to live it." This commitment to lifelong learning extended beyond educators, impacting students who observed the professional growth of their teachers. Lynn encapsulated this notion regarding the goals of the ESI: "It models continuous learning. So, it's great for students to see that in their teachers, to see them pursuing something that they're passionate about, whether it's in the class or outside of the class. It gives you something more to talk about." The ESI served as a vital mechanism for nurturing educators' professional development in harmony with the school's overarching vision and mission, fostering a culture of continuous learning and growth among its participants.

The AIS staff participating in the ESI worked toward school-wide goals and developed individual goals for their projects. According to Donohoo et al. (2020), goal setting for teacher and student learning is integral to a cycle involving evidence-based assessment, analysis, and determining the next steps. Two questions on the ERA Exploring Scholars Application 2023-2024 (see Appendix D) helped Exploring Scholars determine the learning goal for their project: “Impact this will have on students” and “Ongoing benefit to you and [AIS].” For example, one Exploring Scholar shared the impact their project would have on students:

This project will involve every student in the school in an ongoing activity around reading, an activity that has been demonstrated to benefit them academically, socially, and emotionally. It will provide connections to the school's mission and values and enable members of the community who otherwise wouldn't connect opportunities to do so.

Then followed up with the ongoing benefit to the teachers and AIS:

This is a project we are all passionate about- as literacy and literature lovers, we see the benefits of reading on a daily basis, and we know the impact that a project like this could have on the community. It would also be professionally beneficial to us to have a collaborative project under our belts, and we would like the opportunity to write about it and perhaps present on it.

These goals prioritized the child's holistic development as outlined in the school's mission statement rather than emphasizing performance metrics. More specifically, these goals were not even measurable but as Eisner (2002) shared, “Not everything important is measurable, and not everything measurable is important.”

Exploring Scholars' goals was not created in isolation either. The ERA Exploring Scholars Application 2023/2024 required teachers to interact with ERA leaders to outline their passion project before starting the formal application. This collaborative process helped "each person understand their role in valuing and supporting efforts to achieve the larger school goals" (Anderson et al., 2023, p. 4), subsequently increasing CTE.

However, goal setting was familiar to teachers at AIS. Neil shared the layers of goals created at AIS annually: "I think that's nice too because we set our own goals. So, we have a school goal, a department goal, and then we set our own goals." Elis dove deeper into the individual goal-setting process for teachers implemented school-wide: "At the end of your review, you would set goals for the next year, and then that would be sort of a pick-up point on your annual review. It would be like, 'How did your goals go this year?'" These teaching and learning goals created by all teachers were also not done in isolation. Erin shared her experience this year creating a goal for her evaluation with her Associate Dean:

He helped me word out a teaching and learning goal that included adding more structured writing assignments that go with their [the students] work on their website[s]. We're making a process portfolio on the website, so he helped me word that out a little bit in our first, um, September meeting, goal setting meeting.

Notice again that Erin's goals prioritized a holistic approach to child development, aligning closely with the school's mission statement rather than solely emphasizing performance metrics. Thus, all AIS teachers collaboratively created personal goals aligned with the school's goals each year, whether they participated in the ESI or not. The difference came down to how the ESI provided structures for Scholars to work within to reach their goals.



## Space for Learning

Just being allowed to do it, being given the space to do it, is huge for motivation.

—Lynn

After teachers collaboratively set their goals in the ES, they felt an expectation to prioritize their project's more tangible objectives than the teacher's individual evaluation. Neil illustrated this sense of accountability, noting how his acceptance into the program spurred him to focus on his project, integrating it into his classroom practices. He reflected,

[My project] creates a sense of accountability... It's like something I'm already wanting to do so this is the encouragement to do it. And it definitely has encouraged me this year to also focus on these approaches. It impacted my pacing because I was like, well, these are things I need to do because it is my Exploring Scholar project. So rather than being something that I do, it became more of a focus.

Similarly, Todd highlighted the emphasis placed by ERA leaders on the importance of prioritizing time to reflect, underscoring the need to allocate time for introspection during his project: "That was something that was stressed when I started this, to find that time to reflect. So I take the [feedback], and then I summarize and look for patterns, and then I reflect on, okay, so what?" Additionally, the ERA leaders established a structured support system for Exploring Scholars while still allowing autonomy to meet the needs of individual educators. Yagna outlined the support process:

When we start the project, we are asked to tell when do we want to present our project to the whole community. So, for example, if my presentation is in February, I need to have three checkpoints before that... [at each checkpoint] we are just asked to talk about where we stand at this point, how the project is coming along, what we've learned so far about

it, and where do we see going. Especially, I think these checkpoints are more about support systems.

Thus, the ESI allowed teachers to collaboratively create their own goals within the bounds of the school's mission statement, rather than solely emphasizing performance metrics, and subsequently provided the teachers space to “learn and react effectively in uncertain and dynamic situations mediates teacher uncertainty” (Donohoo et al., 2020, p. 160). This practical combination matched the theoretical approach to increase collective efficacy. The absence of a dedicated space for learning, as provided by the ES, alongside the individual goal-setting process during evaluations at AIS, might account for the observed statistical significance between teachers who had participated in the program and those who had not.

The ESI at AIS correlated to higher collective teacher efficacy by fostering goal consensus among educators. This program supported educators in aligning their professional growth with the school's vision and mission, emphasizing continuous learning and meaningful contributions to the educational community. The ESI cultivated a culture of exploration and growth by encouraging teachers to pursue their interests through passion projects and providing guidance. Collaboration in setting goals was evident, as demonstrated by the ERA Exploring Scholars Application process, which required interaction with ERA leaders to outline projects collaboratively. This collaborative approach enhanced collective efficacy by ensuring that each educator understood their role in achieving broader school goals. The ESI created a palpable sense of accountability among participants, encouraging them to prioritize project objectives beyond individual evaluations. Additionally, the structured support system provided by the ERA leaders, combined with the autonomy granted to educators, ensured ongoing guidance and facilitated effective learning and reflection. Overall, the ESI aligned educators' goals with the

school's mission and provided a dedicated space for learning and growth, ultimately enhancing collective teacher efficacy.

### **Cohesive Teacher Knowledge**

The ESI at AIS promoted collective teacher efficacy by facilitating collaboration and knowledge dissemination among educators, transforming teachers' continuous learning into a celebratory and collaborative endeavor. One key aspect of the ESI was the emphasis on collaboration, exemplified by the requirement for scholars to collaborate with peers within and outside the school community. This collaboration facilitated the sharing of knowledge, expertise, and best practices among educators, thereby enriching collective teacher knowledge and collective teacher efficacy. Additionally, the ESI mandated various forms of knowledge dissemination such as creating posters depicting project findings, holding ERA Learning Sessions for students and faculty, and publishing scholarly work related to the projects. These initiatives ensured that insights gained from research were widely shared within the educational community, contributing to a shared understanding of effective teaching practices. Moreover, the ESI built collective teacher efficacy by fostering a culture of continuous learning within the school community. In this learning environment, trying innovative educational practices became a cultural norm where new ideas and perspectives were welcomed and recognized. Overall, the ESI at AIS enhanced collective teacher efficacy by promoting collaboration and knowledge sharing among educators, shaping a culture of continuous learning.

### **Spread the Wings**

The ESI at AIS facilitated collaboration among Exploring Scholars and educators within and outside the AIS community, facilitating a dynamic exchange of knowledge and ideas. Myles saw collaboration's value: "As an educator, you can't be isolated at all. You need to spread the

wings, talk to people, and get ideas.” This collaborative spirit was evident in the ESI’s structure of check-ins and the Collaboration and Connection section of the ERA Exploring Scholars Application 2023/2024 (see Appendix D). Aria shared an overview of the collaboration between ERA leaders and selected Exploring Scholars: “You picked a topic that you were passionate about... you were assigned a leader in the school that you would talk to about it, and you had check-ins at various points. Then you created like some kind of output at the end of it.” The collaboration between ERA leaders and Exploring Scholars focused on supporting the scholars in completing their projects. To help facilitate this collaborative process, the ERA leaders developed a document called the Exploring Scholars 23/24 Sign-Ups (depicted in Figure 7), which served as a tool for tracking the progress of current Exploring Scholars and was shared among the ERA leaders. The process has evolved, contingent upon the fluctuating numbers of ERA leaders and Exploring Scholars. Yagna provided further details on the collaborative check-in process in recent years:

I think these checkpoints are more about support systems. A constant question that always comes up from the [ERA leaders] is, “Do you need any support? Do you need any resources?” So, I think when they ask this question every time, it sort of gives us the strength to know that, okay, at this point, I don't have any need for any resource or anything. But if I need it, I know I can just go back to them, write an email, and then I will get what I want. I feel like if this is not working or I can't get this to work, then they'll help you figure that out.

The ERA leaders consistently inquired about Yagna’s needs, offering support and resources whenever necessary. This inquisitive structure ensured that Yagna felt empowered to take ownership of his project while knowing assistance was readily available. It fostered a sense of

confidence and reassurance, allowing Yagna to navigate his project with autonomy while having the backing of the ERA leaders.

Myles shared a similar collaborative experience with ERA leaders on his passion project: “They do the checkup on you and say, ‘How are you doing? Do you need any help?’ For example, the Director, I call, I share work with him, and he gives comments all the time, so that’s very helpful.” This collaborative framework ensured that Exploring Scholars received the necessary support and resources to actively engage in their passion projects. It fostered a cohesive team environment where information was shared among ERA leaders and scholars, facilitating progress toward complex goals and mastery experiences (Anderson et al., 2023). Through this process, collective teacher efficacy was cultivated, empowering educators to collectively believe in their ability to positively impact student learning and outcomes. However, it is essential to note that the collaboration requirements for passion projects extended beyond mere research processes. They encompassed collaboration around building a robust education knowledge base, emphasizing the need for scholars to engage in collaborative efforts during the research phase and throughout their projects.

To help Exploring Scholars grow as educators, the ESI encouraged collaboration with educators outside of ERA. The ERA Exploring Scholars Application 2023-2024 explicitly asked Exploring Scholars to detail how they would “collaborate with other faculty or others outside of [ERA].” Past and current scholars have utilized various avenues for collaboration including engaging with AIS staff, Global Scholars, and other educators from diverse backgrounds worldwide. Connecting with other educators and administrators at AIS offered numerous benefits including the opportunity to delve deeper into reflection and utilize expertise from the AIS staff.

Figure 7

## Exploring Scholars [pseudonym] 23-24 Sign-Ups

Name and project title	Poster complete	Check-in Semester 1 Date and time suggestions	Check-in Semester 2 Date and time suggestions	Sharing date Please include: <b>Date:</b> Choose a specific date. <b>Time:</b> 6:30-7:30pm <b>Location:</b> Library or Trustee room <b><u>No presentations in April please!</u></b>
<p>██████████ <i>Math Videos for Flipped Classrooms and to Serve Tutoring Gaps</i></p>	YES	<p>Tuesday's between 10:00 - 13:45  Tues 7th November ██████████</p>	██████████	<p>17th April- PD morning. 8-9:15?  ██████████ room</p>
<p>██████████ <i>Embedding Executive Functioning Skills within the Classroom</i></p>	YES	<p>Personal PD time - Wednesday September 20th ██████████ <b>Caught up with</b> ██████████  2pm - Thursday - October 5th ██████████</p>	<p>Wednesday Feb 14 TBC  ██████████</p>	<p>Tuesday March 19th ██████████</p>
<p>██████████ <i>Teaching through Simulations</i></p>	NOT YET	<p>██████████  <b>Checked in</b></p>	██████████	<p>During SEL time Feb 21st</p>
<p>██████████ <i>Exploring intercultural competence through creativity, and critical thinking in the innovation lab</i></p>	YES	<p>██████████  <b>Checked in</b></p>	██████████	<p>Semester 2 10th April during SEL time 3-3:30pm ██████████</p>

Figure 7 Continued

Name and project title	Poster complete	Check in Semester 1 Date and time suggestions	Check in Semester 2 Date and time suggestions	Sharing date Please include: <b>Date:</b> Choose a specific date. <b>Time:</b> 6:30-7:30pm <b>Location:</b> Library or Trustee room  <b><u>No presentations in April please!</u></b>
<p>██████████ <i>Interdisciplinary Collaborative Learning Across the Campuses: Exploring the concept of Beauty in French and Design Classes.</i></p>	YES	<p>Monday, 2nd October Mayen Schedule 11.40 am to 2 pm</p> <p>Tuesday, 3rd October Mayen Schedule 10 am to 12 pm.</p> <p>4th October Mayen Schedule 8 am to 12 pm.</p>	<p>January 2024, Monday 20th 11.40 am to 2pm</p> <p>Tuesday, 21st Jan 10 am to 12 pm</p> <p>Wednesday, 22nd Jan 8am to 10am</p> <p>██████████</p>	Wednesday, February 28th.
<p>██████████ <i>Student Voice and Learning through Literary Theories</i></p>		<p>Nov 13 - 15 11:30 - 12:15 (lunch)</p> <p>Yes</p>	<p>Feb 26 11:30 - 1215 Feb 28 12 - 12:45 March 1, 11:30-1215</p> <p>██████████</p>	<p>Semester 2 (March/April) Thursday March 14</p> <p>██████████ LIBRARY</p>
<p>██████████ <i>Using the School Mission Statement to Create a Schoolwide Reading Project</i></p>		<p>██████████ A Block November 16th</p> <p>██████████</p>	<p>██████████ A Block February 12</p> <p>██████████</p>	<p>Thursday March 14</p> <p>██████████ LIBRARY</p>

Elis had not planned on collaborating with a peer to complete her passion project, but after following the advice of the Director of Research, she found the collaboration offered a more profound reflection: “I think working with a co-author the second year was really good for the reflective practice, and again, the Director really pushed me to do that. I think that part really pushed the reflection.” Other Exploring Scholars built this collaboration into their project from the onset. One scholar's application highlighted the intention to draw upon the personal knowledge of AIS staff, building “shared knowledge” through their peers and developing objectivity for their learning:

My [AIS] colleagues are native speakers and therefore come with a wealth of personal knowledge with regards to comics as they have been exposed to them in various ways. I would draw upon their personal knowledge to build shared knowledge. I also look forward to collaborating with librarians and comic experts within and outside of [AIS] to deepen my knowledge and to give more objectivity to the project.

The ERA further facilitated collaboration by connecting Exploring Scholars with peers outside the AIS community, increasing access to diverse perspectives. For example, Global Scholars is a program in which researchers, professors, teachers, entrepreneurs, authors, and artists are invited to visit AIS to interact with the entire learning community. The ERA identified the goal of the Global Scholars: “The goal of our [Global Scholars Exchange] is for [AIS] faculty and academics from around the world to rub shoulders so that we all may feel the excitement of new ideas coming to life and the commitment to lifelong learning.”

Since its inception in 2014, hosting Global Scholars on campus has become an integral part of the culture of AIS. In fact, Global Scholars are so engrained at AIS that an application for the ESI indicated collaboration with a Global Scholar before the application was even submitted:



I've already connected with a [Global Scholar employed as an educational consultant] and her colleague. We discussed implementing ideas in the classroom and the importance of this topic [executive functions]. I plan to build on the Professional Development I conducted with Blanc faculty and push into some classes to share ideas and monitor student progress.

As the ERA leaders facilitated both Global Scholars and Exploring Scholars, these connections were standard throughout the different stages of the Exploring Scholar's passion projects. The interactions between Exploring Scholars and Global Scholars built the Exploring Scholars' knowledge and helped refine passion projects while instilling confidence and empowerment in pursuing their learning goals. Todd's experiences highlighted this advantage:

The first chat we had was the [ERA leaders] and myself. We just sort of narrowed down what's the question. The question was, how do I increase my efficacy? And I'm using student voice for the lenses. It didn't take long. And then we had another [Global Scholar], she was a professor, and she was actually really into research methods. The Director and her sat down with me, and she gave me some tips on how to ask my students questions. She advised me to also do interviews, which are going to happen later this month. But other than that, I feel like those were sort of the two structural things that needed to happen for me to feel confident and empowered to do my thing.

However, in line with the ESI's ethos of autonomy, collaboration was not mandated to exclusively involve educators associated with AIS. Lynn shared the ability of Exploring Scholars to reach beyond AIS educators and Global Scholars to educators from around the world: "It [the ESI] allows people, it allows the staff to collaborate with other colleagues from around the world, depending on what their project is." This collaborative approach aligned with the idea that

to build cohesive teacher knowledge, “leaders should sustain opportunities that increase staff interdependence in joint work surrounding current practices and targeted improvements in best practices” (Anderson et al., 2023, p. 4). The program encouraged a shared understanding of effective teaching practices by providing opportunities for Exploring Scholars to collaborate with AIS staff, Global Scholars, and educators from diverse backgrounds worldwide. The opportunities for collaboration provided by the ESI not only enriched individual educators' knowledge but also contributed to the collective knowledge base of the teaching community, ultimately enhancing collective teacher efficacy.

When teachers were accepted into the ESI, they were familiar with collaboration. Initial Scholars Program, a professional learning initiative mandatory for all teachers new to AIS, required educators to select a focus topic and form small groups of three to four colleagues, all dedicated to enhancing their teaching techniques to meet the needs of AIS students. Over six weeks, these small groups would meet to research best practices, engage in peer observation sessions with subsequent discussions, record a teaching session, and receive peer feedback. These activities promoted collaboration among group members, peers, and department heads. Initial Scholars set the tone for all future professional development, laying the foundation for continuous growth and fostering robust collegial relationships to support teachers' tenure at AIS. On a schoolwide level, professional learning communities (PLCs) run all year long. Elis described PLCs as another authentic learning experience for groups of teachers:

The other piece that I would say is an example of authentic professional development with reflective practices was...Oh, what do they call it? They have a good name. It's like small professional development groups, they're little like professional, there you go, PLCs! So we have professional learning time, and our PLCs fit within that.

Myles mentioned that PLCs convened on some Wednesday mornings, while Maddox described PLCs as an incredible practice. However, despite the existence of the Initial Scholars Program, PLCs, and the ESI, collaboration often suffered due to time constraints. Maddox emphasized the scarcity of time as a significant barrier to fostering cohesive teacher knowledge and collaboration for all teachers, stating, “I want more time, and I alluded to time as a resource here. It’s tricky. But that’s one big thing, coming together as a faculty to talk about it [best practices], discourse on it [best practices].” Several participants echoed this sentiment. Enna expressed, “I’m still finding [it] difficult because it’s hard here to find time, time for teachers to meet. I think it’s even difficult for departments to even meet.” Similarly, Maeve conveyed, “It’s a time issue. It’s a where are we going to fit it in the schedule? When you have teachers who are the ones who do activities, who are the ones who do dorm, that’s the issue.” Without the various collaborative initiatives in place, such as the Initial Scholars Program, PLCs, and the ESI, time constraints were a significant obstacle to fostering cohesive teacher knowledge and collaboration among educators at AIS.

Thus, the ESI at AIS fostered collaboration among educators and provided a framework for maintaining opportunities for educators to rely on each other and work together effectively. This interdependence was vital for cultivating cohesive teacher knowledge and driving continuous improvement in educational practices (Anderson et al., 2023). Educators were empowered to collaborate, share ideas, and collectively enhance their teaching techniques through collaborative initiatives like the ESI. As a result, the program not only enriched individual professional growth but also strengthened the collective knowledge base of the teaching community, paving the way for ongoing improvements in educational practices.

## **Knowledge Dissemination**

Educational Research at Alpine's efforts to require Exploring Scholars to participate in ERA Learning Sessions, create posters, and publish their findings served as valuable forms of knowledge dissemination, increasing cohesive teacher knowledge. These platforms enabled educators to share their insights, experiences, and best practices, enhancing the collective knowledge base and fostering teacher cohesion. Furthermore, to cultivate collective efficacy and cohesive teacher knowledge, providing opportunities for vicarious experiences was crucial. To capitalize on vicarious experiences, teachers required chances to delve deeper into each other's work (Donohoo et al., 2020). Developing visuals, hosting ERA Learning Sessions, and publishing findings of Exploring Scholars beyond their classroom fostered collective efficacy and promotes a more unified and connected staff.

When Exploring Scholars completed the ERA Exploring Scholars Application 2023/2024 (see Appendix D), three questions confirmed the additional requirements of all Exploring Scholars: create a poster depiction of the project, each Exploring Scholar is expected to schedule, prepare, and hold an informal talk for students and faculty, to publish on a theme related to your project. Neil referred to these expectations, "There's very, let's say clear, but open expectations... to meet these quite reasonable requirements that you have these check-ins, make a poster, and you eventually present what your project was." The informal presentations for students and faculty typically occurred between February and April, and the Exploring Scholar was responsible for selecting the date and location on campus. Lynn highlighted the emphasis of ERA Learning Sessions during Wednesday morning PD. Still, since that was siloed to small groups of educators, the ERA leaders encouraged evening talks to reach more AIS staff:

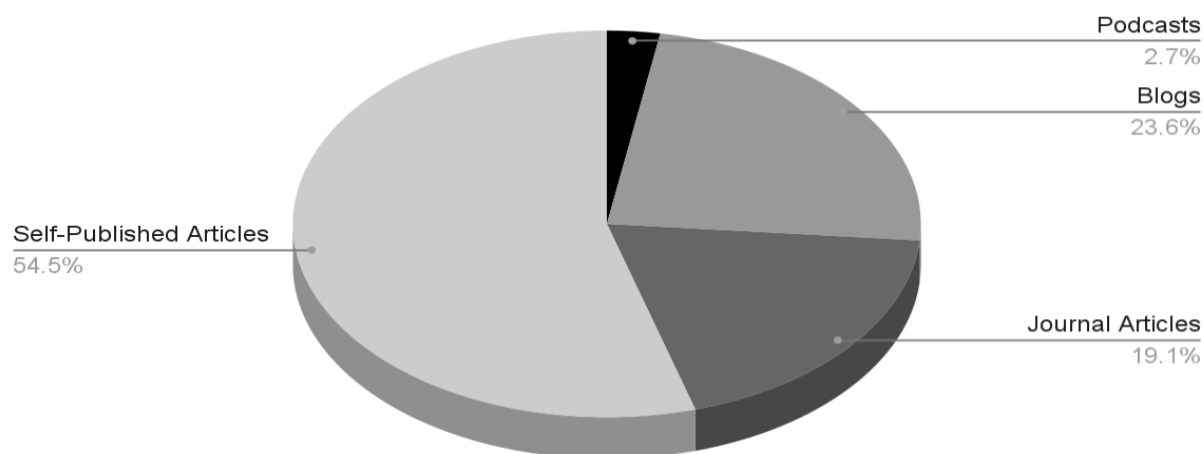
So, this Wednesday morning, we dedicate to that [professional development] and you can share that with other teachers. You can choose to share that [your knowledge] through those Wednesday morning slots. We have an hour and a half every week. It's mostly taken up with meetings, but the best ones are when we get a chance to share good practice with other colleagues. So that's encouraged. Through [ERA], they encourage the evening talks so you might present to other colleagues.

However, due to the data collection timeline, this study did not include ESI posters as collected artifacts or ESI presentations as part of its observed events. When delving into the historical records of ERA publications, as illustrated in Figure 8, it was evident a total of 110 publications had been acknowledged by ERA including publications produced by Exploring Scholars. The research conducted by ERA was predominantly disseminated through self-published articles. Over the years, a discernible shift in the popularity of publication formats has been observed. This transition is highlighted in Figure 9, where it was evident that self-published articles, once the primary mode of publication, had experienced a decline as ERA has evolved. Concurrently, there has been a notable rise in the popularity of Blogs as a favored medium for sharing educational research conducted at AIS. These publications were essential in building a collective knowledge base and encouraged educators to establish networks with colleagues within and beyond their immediate school community. These connections enriched professional relationships and created opportunities for collaboration and professional growth. Furthermore, such publications played a vital role in recruiting and retaining talented educators as they served as evidence of ongoing teacher development, which was deemed “critical to attracting and keeping the best and brightest people in the profession” (Loucks-Horsley, 1987, p. 1). Many past and present Exploring Scholars perceived the program as a means to foster their growth not only

as teachers but also as educational researchers. Lynn fondly recalled how the research work published by ERA initially attracted her to the school, stating, “I rang up for my interview and said, I’m really interested in the [ERA] projects that are taking place.”

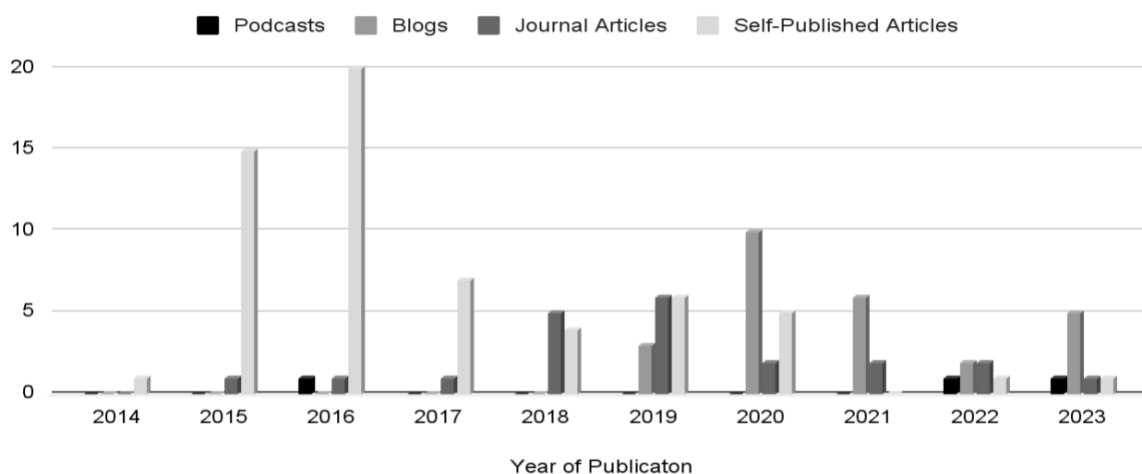
**Figure 8**

*Publications from Educational Research at Alpine since 2014*



**Figure 9**

*Publications from Educational Research at Alpine by Type*



Similarly, Todd viewed the ESI as a pathway to publication, expressing his interest in publishing his work and appreciating the Director's assistance in connecting him with relevant networks. Despite feeling some apprehension, Todd saw publication as the next step in his professional development journey: "I'm interested in trying to get published, and the Director sent me a few different things within his network that can make that happen. I'm a bit anxious or nervous to do that, because I never have. But that's going to be my next step, even if it happens next year." Todd's aspiration to advance professionally by bridging his classroom practices with current educational research underscored the ESI's role in facilitating growth beyond the immediate school environment.

Neil recognized the ESI as a professional learning program inspiring professionals beyond the scope of AIS:

[Exploring Scholars Initiative] helps us do that [become professionals] because it encourages people, supports people to continue their professional development and present at conferences, do blog posts, and share their findings and experiences with a broader audience, again contributing more to the educational ecosystem.

Lynn, Todd, and Neil were emblematic of a broader trend among Exploring Scholars, where many leveraged the program to advance their career in education. Past Exploring Scholars have pursued further academic qualifications in their respective fields or even ventured into entrepreneurship, drawing on their research experiences within and beyond the ESI. Eisner (2002) asserted: "By broadening the forms through which the educational world is described, interpreted, and appraised, and by diversifying the methods through which content is made available, and teaching methods are used, the politics of practice become more generous" (p. 246).

The ESI broadened the scope of educational discourse for AIS staff and encouraged them to share their methods, adding to the diversity in which content was available to all educators. Thus, not only did the ESI provide an opportunity for AIS educators to have mastery experiences, but it also provided a pathway for Exploring Scholars to share their knowledge base, contributing to the evolution and enrichment of educational practices.

The ESI at AIS might contribute to the development of collective teacher efficacy by facilitating collective teacher knowledge among educators. Through this program, educators collaborate with peers to build on best practices as well as growing as educators who contribute to the teaching community.

By encouraging teachers to collaborate with peers, both within and beyond AIS, the ESI fostered interdependence among educators, leading to joint efforts focused on improving current practices and implementing best practices (Anderson et al., 2023). These collaborative efforts provided essential opportunities for Exploring Scholars to understand and learn from each other's work, contributing to cohesive teacher knowledge and collective efficacy. The ESI required Exploring Scholars to participate in ERA Learning Sessions, create posters, and publish their findings, which served as valuable forms of knowledge dissemination and increased cohesive teacher knowledge. As the passion projects were shared, they capitalized on vicarious experiences as teachers from AIS and beyond learned about the Exploring Scholar's work (Donohoo et al., 2020).

Although this study did not include ESI posters as collected articles or presentations as observed events, historical records showed the number of publications supported by the ERA leaders. These publications not only enriched the collective knowledge but also attracted and retained talented educators by showcasing ongoing professional development. Many past and



present Exploring Scholars viewed the program as a pathway to further growth, both as teachers and educational researchers, contributing to the evolution and enrichment of educational practices. Ultimately, the ESI provided an avenue for AIS educators to have mastery experiences and share their knowledge base, thereby contributing to the advancement of educational practices and the collective growth of the AIS staff and beyond.

### **Supportive Leadership**

The supportive leadership within the ESI was exemplified by the PL program's voluntary nature, allowing participants to opt in based on their availability and interests rather than viewing it as an additional burden to an already full schedule. Supportive leadership involved school leaders protecting teachers from extraneous tasks and focusing on shielding teachers from distractions (Anderson et al., 2023; Donohoo et al., 2020). Notably, the ESI is voluntary. The AIS staff were given the opportunity to join in light of their own time constraints and investment in growing. Consequently, participants did not view the ESI as an additional burden but rather as a chosen experience for professional growth, underscored by the honor of being selected as a participant. Thus, the application process itself also set a supportive tone in leadership. Upon acceptance into the ES, educators' passions and aspirations for personal growth were recognized, conveying the ERA leader's acknowledgment and esteem for their work, thus fostering a sense of validation and support. Recognizing individual accomplishments bolstered collective teacher efficacy (Donohoo et al., 2020). However, other characteristics of ESI leadership connected to leaders recognizing educators' accomplishments in a nuanced way.

The ESI at AIS embodied a leadership style that enhanced teacher perception of supportive leadership by prioritizing the Scholar's learning journey and empowering educators to define their vision of success. Within this program, leaders were deeply involved in supporting

and acknowledging participants' work. They conducted proactive check-ins, maintained constant accessibility, and fulfilled commitments to support teachers, framing the passion project as a collaborative endeavor driven by the teacher's professional growth. As a result, the passion project did not feel like an additional task but rather a purposeful collaboration aimed at enhancing educators' skills and knowledge, increasing collective teacher efficacy. Moreover, ERA leaders valued the expertise and professionalism of Exploring Scholars, empowering them to define success within their passion projects. The sole expectation for Exploring Scholars was to share insights derived from their learning experiences. This approach, characterized by complete freedom and trust, instilled confidence in Exploring Scholars and empowered them to be teacher leaders making impactful decisions regarding instruction, thus enhancing collective teacher efficacy. Overall, the ESI recognized teachers' expertise and practice as professionals and supported them in applying their knowledge effectively in their practice.

### **The Scholar's Learning Journey**

The ESI was structured to guide educators on a professional learning journey, giving them the tools to take charge of their growth through teacher-led check-ins. Elis captured the self-directed essence of the program:

I feel like the [Exploring Scholars Initiative] is an opportunity not just to pursue your passion and learn about a particular topic as part of your professional development but also to experience what a more self-directed learning experience would feel like. I think both of those things are really valuable because, again, many people, almost all of us, who have successfully become teachers are products of a system that is antiquated.

Ensuring teachers become more self-directed was a significant undertaking the ERA leaders recognized. Rather than rigidly outlining a predetermined process for each Exploring

Scholar, the ERA leaders actively participated in the learning journey alongside the scholars. They did so by conducting check-ins tailored to address the individual needs of each scholar instead of following a prescribed curriculum and timeline. These check-ins fostered a collaborative and supportive environment for professional growth. Yagna provided specifics on the fluid structure of the check-ins, highlighting how these interactions were part of the support systems offered in the ESI:

There is no formulaic approach to it. I think we are just asked to talk about where we stand at this point, how the project is coming along, what we've learned so far about it, and where we see it going. I especially think these checkpoints are more about support systems. A constant question that always comes up from [the leaders] and all that is, "Do you need any support? Do you need any resources?"

These check-ins were scheduled by the Exploring Scholars early in the learning process but they were flexible and served as just one avenue through which ERA leaders connected with Scholars. Enna highlighted the leaders' proactive approach, mentioning how they regularly dropped by to inquire about her progress and well-being. She said the leaders were "very good to pop by my office...and be like, 'Hey, how's things going? If you do need a check-in, let me know.'" This proactive outreach provided additional support for the learning process and granted Exploring Scholars ownership of their learning journey. It signaled that ERA leaders prioritized Exploring Scholar's professional growth over rigid program structures.

This emphasis on prioritizing learning created an atmosphere within the Exploring Scholars Initiative where Exploring Scholars took charge of their tasks and professional development. By empowering Scholars to determine the necessary steps for their passion

projects and personal growth, the initiative eliminated the sense of obligatory compliance. Yagna encapsulated this sentiment by outlining the sole requirements for Exploring Scholars to fulfill:

We are told very clearly the project doesn't have to always end in a fantastic something that's like a tangible output. It's a learning process. So, if it doesn't culminate in anything concrete, it's absolutely fine. As long as you're able to observe your learning process in this and you're able to glean away something from it, it's nice.

The ESI at AIS represented a paradigm shift in professional development, empowering educators to take control of their growth journey. Through teacher-led check-ins and a fluid, self-directed structure, the program fostered a collaborative and supportive environment for professional growth. The proactive approach of ERA leaders demonstrated through their personalized support and flexible check-in sessions underscored their commitment to prioritizing Scholars' professional development over rigid program structures. By emphasizing learning over predefined outcomes and encouraging Scholars to take ownership of their learning process, the ESI cultivated an atmosphere where Scholars were empowered to explore their passions, reflect on their experiences, and ultimately grow personally and professionally.

## **Trust**

Educational Research at Alpine leaders empowered Exploring Scholars by valuing their expertise and professionalism, allowing them to define success within their passion projects. This approach, characterized by freedom and trust, fostered confidence and enabled Scholars to make impactful instructional decisions, ultimately enhancing collective teacher efficacy (Anderson et al., 2023). The goal of the ESI was “to provide support for creative and driven staff to explore educational issues in depth in our school context to enliven their experiences of professional development at [AIS] while enriching the academic environment for us all.” Maddox

emphasized the importance of this goal for AIS educators, saying, “Basically, there's a lot of talent to be had in [the AIS] faculty, and we should capitalize on that energy and talent, what is happening in classrooms already.” The ERA leaders leaned into these skills and pedagogical knowledge by creating an active learning environment where meaningful hands-on activities allowed AIS staff to actively construct knowledge and apply it to real-world situations (Merriam & Bierema, 2013). Yagna appreciated this approach as an opportunity for growth, noting, “We are given complete freedom, thereby giving us opportunities to learn from our mistakes.” However, it took trust to give free rein to AIS staff. Levi highlighted the necessity of genuine trust for AIS staff to have agency, stating, “It needs to be hands-off to accomplish the goal of supporting agency. You can’t like fake trust; you have to have real trust.” This level of trust must be conveyed to the Exploring Scholars through respect, autonomy, and allowing individuals to make decisions about their learning. Elis believed the Director of Research instilled a high level of trust in AIS staff in the ES, creating a learning environment in which the ‘student’ determined what constituted success:

It's so easy to have a picture of what success looks like and to drive your students or your athletes towards attaining the picture you have envisioned. [The Director of Research], in the way he structured the program and just who he is pedagogically as a teacher, he's quite open to the results looking different than what he thinks the results should look like. He's really good at checking himself, “I would have done it this way, but I'm gonna let this process happen.” I think there's two things that happen there. One is that you leave it open, that yes, the person knows exactly what you're doing and that's the correct outcome, but it's also respecting their process as a learner by not intentionally guiding them towards the outcome that you've already predetermined.

The confidence placed in AIS staff was evident in the potential impact of Exploring Scholars projects, extending beyond individual classrooms. Notable projects yielded substantial results, prompting leadership to implement them across the school community. For instance, an Exploring Scholar project originated the ongoing adoption of standards-based grading. Audrey highlighted this unique trust, emphasizing how it fostered teacher leadership within the Exploring Scholars Initiative, enriching the academic environment:

No one can tell [leadership] better what does and what doesn't work in a classroom... I think the [Exploring Scholars Initiative], when given the guidelines, operating within that bound of autonomy, gets to do that, right? It [ES] gets to have the opportunity to get outside the lane and operate on a level of leadership that maybe not every classroom teacher in every school feels able to do.

Thus, the trust ERA leaders placed in Exploring Scholars empowered them to assume roles as teacher leaders, granting them agency and the opportunity to influence “instructionally relevant school decisions” (Anderson et al., 2023, p. 4). Christophe expanded on this notion, linking the ESI’s purpose as a professional learning program to the leadership opportunities it provided for AIS staff: “Here they're leading, they're part of the leaders on saying they're role modeling, learning, teaching because they're learning themselves.” The ERA leaders also leveraged this trust to continuously refine the ES, ensuring its relevance and effectiveness for AIS staff. They demonstrated a continued commitment to valuing the expertise and professionalism of the staff by actively soliciting and responding to feedback. Yagna underscored the significance of this feedback loop, highlighting not only the reception but also the proactive response of the ERA leaders:

They take feedback from all of us every year. The [ERA] leadership takes feedback from us, so I think they're constantly improving it, and that's how probably today's structure is good because they've taken feedback from the previous year's teachers who have done it. So that's why we are being served the best right now.

The ESI at AIS epitomized a culture of trust and empowerment where ERA leaders valued the expertise of Exploring Scholars and granted them autonomy in defining success within their passion projects. This approach not only enhanced individual confidence by recognizing the wealth of talent within the Alpine staff but also facilitated impactful instructional decisions as initiatives led by Exploring Scholars were adopted school-wide, ultimately contributing to the collective efficacy of the teaching staff. Through these efforts, ERA leaders cultivated an environment of trust and autonomy and nurtured a culture of continuous learning, growth, and innovation among Alpine staff, ultimately enriching the academic environment for the benefit of all.

### **Embedded Reflective Practices**

The Exploring Scholars program at AIS did not directly influence the integration of embedded reflective practices as defined by Donohoo et al. (2020), “the processes by which teams work together to examine sources of student evidence to help inform their work” (p. 160). While AIS fostered a culture of individual reflection, collaborative examination of student evidence within teams to inform teaching practices was not widely utilized within and outside the ESI framework. The autonomy prized by Alpine educators often led to diverse approaches, even when addressing similar standards or student cohorts, posing challenges in collecting and assessing student evidence consistently.

When autonomy becomes excessive, it can hinder collective teacher efficacy by creating silos of individual practices that isolate educators from collaborating effectively with their colleagues. These silos could result in a lack of shared goals, inconsistent approaches to teaching, and reduced collective confidence in the team's ability to achieve positive outcomes for students. Todd indicated:

We do our own thing. It's so weird because it's just behind that wall, right? And like, I would love to co-teach more, learn from it more, but it just, it's hard to find the time. And I do teach some of the same [units], so this year it's going to be three of the same [units] out of the six. So, we do have some collegial discussions and sharing resources.

He reflected on how he and another Alpine educator taught the same classes, covered the same standards, and even shared a wall, providing the opportunity for the two educators to work together and analyze student evidence to inform their practices, yet they did not. Lack of collaboration resulted in a lack of shared goals between the two Alpine educators and inconsistent approaches to teaching, blocking the opportunity for embedded reflective practices.

Erin reflected on this challenge, noting the amount of expertise available amongst the Alpine staff could be valuable in growing as an educator but lacked the time and structures to learn from each other:

Because we have [the] upper campus and we have the lower campus and you have the IB program and we have this program, there's no blend, so we have united a ton of knowledge and a ton of expertise. "Hey, how would you do this better, and how would you do that better?" But we don't get the chance to mix and mingle. We could, at these professional development days, but we aren't actually given colleague time.



Coming from a different angle, the ESI promoted collaboration, linking Exploring Scholars with educators worldwide and fostering a global exchange of ideas. However, implementing structured reflective practices depended on the scholars as they led their learning journeys. Autonomy played a crucial role again as unless Exploring Scholars chose to collaborate with fellow Alpine staff teaching similar classes, the chance for teachers to “reflect on feedback from one another and from students to improve practices” (Anderson et al., 2023, p. 4) was missed.

While structures at AIS fostered a culture of individual reflection and the ESI promoted collaboration, both fell short of promoting the collaborative examination of student evidence within teams, which was essential for informed teaching practices as defined by Donohoo et al. (2020). The autonomy prized by Alpine educators often resulted in diverse approaches to teaching and learning, isolating educators from effective collaboration and impeding collective teacher efficacy. Todd and Erin's reflections highlighted the missed opportunities for collaboration and shared learning among Alpine staff despite the potential benefits of tapping into the wealth of expertise available within the school community. To maximize the impact of the ES, efforts should be made to formalize support and systems facilitating teacher collaboration focused on examining student evidence, an embedded reflective practice capable of increasing collective teacher efficacy at AIS.

### **Empowered Teachers**

The ESI at AIS has not impacted the teacher leadership and agency felt by AIS staff. Exploring Scholars experienced agency by demonstrating influence over their professional growth; however, the sense of agency remained siloed to individual professional development for most Scholars. Several passion projects have gone beyond the confines of individual

classrooms to positively impact the entire school community, granting scholars ownership of school processes. However, the scarcity of such opportunities restricted the PL program's ability to effectively empower teachers at AIS. Consequently, the ESI has been identified as an untapped resource, falling short of enhancing collective teacher efficacy.

### **Untapped Resource**

The Director of Research articulated the aim of the Exploring Scholars Initiative as “helping the school culture create an organization of learning and an organization that learns as opposed to a stagnant organization, so creating a personal agency and learning environment for everybody at [AIS].” Therefore, the ESI is structured to empower Alpine staff as learners, ultimately evolving as educators. Neil underscored this with his perception of ERA being an outlet for Alpine staff who want to grow:

I do feel empowered, and a lot of it is the [ERA] program. You know, it's kind of the professional version of, [when] we as teachers say to students come to us [during] office hours with questions... we ask them to come for conferences and these things. But it's always really encouraging when students are proactively coming and getting feedback on writing when they don't understand something or when they just need a clarifying question. That's always encouraging. I think [ERA] is kind of maybe the outlet for teachers who want to be proactive in their professional development.

This empowerment was demonstrated by the significant number of Exploring Scholars who leveraged the professional learning experience as a catalyst for their professional advancement. Lynn highlighted past Exploring Scholars who had gone on to ‘do a PhD,’ pursue various research endeavors, or even establish their educational businesses. Levi further elaborated on the impact of the ESI on past Scholars who had taken proactive steps:

There [are] people who are absolutely like, this has been really transformative for them, or they combined it with their master's or PhD work that [they] were doing online or some other project that developed into maybe consulting that they went and did, or publishing, or presenting. So just that feeling of being professional because you're working beyond the limits of the school.”

However, there were a select few Exploring Scholars whose agency extended beyond their learning, as their passion projects were adopted school wide.

As shared in Chapter IV, several current school systems and structures were first developed in the ESI such as standards-based grading, a schedule rewrite, and classroom furniture. Audrey discussed,

These initiatives were first introduced by [Exploring Scholars], whether they're here still or not, and then were eventually adopted across the whole school, some eight or nine years ago, some a couple of years ago. So I think it's a pretty unique way in which [we] can be involved in the direction of the school.

She highlighted the Exploring Scholars Initiative's distinct role in advancing the school's progress on these systems and structures.

Elis experienced this distinct role of ESI as her passion project evolved into a school-wide initiative:

I was really uncomfortable with the program, with the status quo, that I was professionally responsible for implementing... [ES] was a really great experience of how to enact change. It was slower, but it was really effective. So instead of fighting the organization saying, “It's ridiculous. Why are we doing it?” It was much easier to say, “Oh, interesting. That's how you do it here. Let me look at that, hmm. I'm not sure if this

is effective.” Right? The first step was like measuring who's going on...Is that actually the intention? Then, in the second phase, actually having an alternate [method]. Then pretty much all the other [staff implementing the program] in the organization saying, “Oh my gosh, we want to do that too.” That was like a bit of an epiphany for me of how to create change within an organization.

Elis’s passion project involved considerable effort in developing a student support framework that would benefit Alpine students. After sharing her insights from the ES, she witnessed firsthand how her efforts positively impacted Alpine staff and students. Elis gained “decision-making power on important issues related to school improvement” (Donohoo et al., 2020, p. 158), an experience she described as “a really great experience of how to enact change. It was slow, but it was really effective.” Elis’s reflection highlighted the potential for the ESI to foster teacher ownership of school processes, developing teacher leaders, and consequently increasing collective teacher efficacy. However, the ESI remained an underutilized resource at AIS as few passion projects developed into a whole school system or structure.

The ESI at AIS was not fully utilized as the knowledge and skills gained through the program were not effectively applied to enhance the school or educational outcomes. Despite ample opportunities for the program to significantly impact the school community, these opportunities still need to be explored. Audrey illuminated the untapped potential of the ESI as a valuable resource for the school:

Over and over again, we’re finding, even our accreditation report says the [Exploring Scholars Initiative is] an untapped resource of the people who know best. It’s a low-stakes way to trial a lot of things and to find out a lot of things about what can make the school a better place.

Unfortunately, the ESI was perceived as a siloed program that Aria identified as “removed a little bit from the day-to-day of the traditional...sense of the school.” This perception might be attributed to the limited funds used to compensate selected Exploring Scholars, which restricted the number of Alpine staff able to participate each year. Cem reflected on the involvement of Alpine staff in the ES, observing that “it seems pretty sequestered to the small group of people that are actually involved in that study.” Moreover, Lynn highlighted the lack of diversity in participation, noting how it seemed to be the same group of people engaging in the ESI repeatedly: “I think there is a bit of a cohort that accepts these projects, and then there's some that just never get engaged at all and don't involve themselves in it at all.”

The small cohort presented additional challenges for collaboration. Despite efforts by ERA leaders to connect Exploring Scholars with peer experts and encourage collaboration, there was still a sense of isolation. Maddox described this sentiment, stating, “One thing I’ve heard from Exploring Scholars is that it can be difficult to see the impact of their exploration or their work because it’s not always, but it’s often a solitary, one-person initiative.” Audrey echoed this concern, expressing that the ESI had become marginalized within the Alpine community:

I think that there has been, and again I’m just projecting here, there’s perhaps the feeling that [the Exploring Scholars Initiative is] a little bit off to the side when it doesn’t need to be. It should be an integral part of our school and the way that we operate, but it feels as though that it’s kind of become marginalized as probably too strong a word, but certainly not playing the role that it used to.

While the ESI at AIS had empowered individual teachers to a certain extent, it had not significantly impacted overall teacher leadership and agency. Despite some passion projects benefiting the entire school community and providing scholars with ownership of school

processes, the program's limited availability hampered its ability to empower teachers effectively, thus failing to enhance collective teacher efficacy. The ESI was identified as an untapped resource with the potential to foster a culture of learning and personal agency for all staff members at AIS. However, challenges such as limited participation, perceived isolation, and marginalization within the school community hindered the program's effectiveness. To maximize the impact of the ES, efforts should be made to address these challenges and integrate the program more fully into the school's operations and culture, ultimately empowering teachers as learners and leaders to drive positive change within the school community.

### **Implications**

Even though AIS is one of the most expensive and prestigious boarding schools in Europe, the experiences of its students and educators closely resembled those in American public schools. The classes at AIS aligned with pathways found in American schools, following standards such as the IB Diploma Program, Middle Years Program, AP, and Next Generation Science Standards. Alpine educators teach classrooms filled with teenagers, many of whom are learning English while meeting personal and family expectations. The saying “Kids are kids” held true in the classrooms, hallways, and cafeterias, demonstrating that the findings were applicable to American public schools.

Regardless of the scale, professional learning programs could elevate collective teacher efficacy within an educational institution. The effectiveness of such programs hinges on several key factors that promote collaboration, innovation, and personal growth among educators. Professional learning initiatives enhance collective teacher efficacy by aligning individual goals with the school's mission, fostering interdependence through collaboration, and cultivating a culture of trust and empowerment. However, it is essential to recognize that simply promoting

individual reflection and empowerment might not suffice; administration and school leaders must optimize structural design and collaborative practices to maximize the program's impact on collective teacher efficacy across the entire institution.

A well-designed professional learning program begins by collaboratively determining and aligning educators' goals with the overarching vision and mission of the school. Aligning goals allows educators to stay content-focused while establishing a solid framework for growth that builds on goal consensus, offering a clear direction for teachers to follow that supports the school's vision. However, it is equally crucial for the PL program to give educators space to explore and develop individually within this framework. This flexibility allows educators to construct an understanding of their unique role in contributing to the school's goals.

Collaboration within the professional learning program is essential as it fosters interdependence among educators, which is vital for cohesive teacher knowledge. Through collaborative efforts, educators benefit from shared experiences and leverage each other's expertise to enhance their practice through modeling. However, the experiences and knowledge learned should not be contained to the PL program's educators. The program should serve as a conduit for disseminating knowledge beyond the confines of the program and the school, providing models for other educators and amplifying the program's impact within the broader educational community.

Supportive leaders play a crucial role in the PL program by collaborating with educators on their learning journey. The leader's approach to coaching should prioritize and respect the choices made by educators, fostering a sense of autonomy and ownership over their professional development. A PL program would promote active learning and a deeper investment in growth by empowering educators to drive their own learning and define their own success. This

collaborative and supportive environment strengthens the bond between educators and leaders and enhances the overall effectiveness and impact of the professional learning program in cultivating collective teacher efficacy.

While reflection and feedback are essential for personal growth (Darling-Hammond et al., 2017), these individual practices are insufficient to impact collective teacher efficacy. By incorporating sustainable structures that facilitate the collaborative reflection of student evidence of learning, PL initiatives might enhance collective efficacy (Anderson et al., 2023; Donohoo et al., 2020). This collaborative approach allows educators to collectively analyze student data, identify trends, and develop targeted strategies to address learning needs effectively.

Providing educators with agency over their professional development empowers them to realize their potential as learners. However, impacting collective teacher efficacy might require additional structural support and collaborative practices within the larger educational setting. When educators influence school improvement (Donohoo et al., 2020), the collective teacher efficacy increases. Thus, PL programs should strive to create environments where educators “feel freer to experiment” (Levi) and innovate, tailoring their approaches to best meet the diverse needs of their students but with an opportunity to take these approaches school-wide.

Professional learning programs hold immense potential to elevate collective teacher efficacy within educational institutions. However, their effectiveness relies on striking a delicate balance between promoting individual empowerment and providing structured support for collaborative practices. While aligning educators' goals with the school's mission and fostering interdependence through collaboration are crucial components, it is equally essential to give educators space to explore and develop individually within this framework.



## **Directions for Future Research**

### **Does Mandating Passion Projects Have the Same Effect?**

The Exploring Scholars Initiative operated as a voluntary professional learning program, allowing Alpine staff to choose whether to participate and when to do so. Some staff members regularly applied to the program to pursue their passion projects, while others never applied. During discussions, participants raised the idea of establishing expectations for participation in the ESI, such as requiring all AIS staff to complete a passion project at least once or mandating attendance at ERA Learning Sessions to increase knowledge dissemination. While mandating participation might seem appealing to ensure widespread engagement in this impactful learning opportunity, there are concerns about whether it would diminish the program's prestige and sense of obligation. These concerns stem from the program's voluntary nature, allowing participants to prioritize their passion projects, which may not be the case if participation were mandatory. Future research should investigate the effects of mandating educators to complete action research on collective teacher efficacy and the overall effectiveness of this type of PL program.

### **How Important is the 'Who'?**

Donohoo et al. (2020) emphasized the pivotal role of supportive leaders in nurturing all aspects of collective teacher efficacy:

The leader plays an important role in nurturing the conditions for the remaining four factors to be realized as well. It is our view that within the practice of leadership, the normative expectations for teachers' collaborations are set. School leaders also establish the processes and procedures that help to empower teachers and ensure that teachers are regularly reflecting on their practice in light of evidence. They create the conditions to foster collaboration, increase teachers' knowledge of each other's work, and build greater

cohesion among their staff. They can also establish a process for gaining consensus on school goals. As such, we propose that it is only through careful nurturing, by leadership, to ensure that all the conditions for CTE are in place that CTE is effectively developed within schools. (p. 161)

Regarding AIS, Christophe expressed his belief in the power of people at an educational institution:

If we want students of impact, we need faculty of impact first, meaning that we really need the right people. It's a people's business. We're very fortunate. We live in a beautiful environment. We have great facilities. But a school, for me, is mostly about people. So, once you have the right people, which I believe we do by and large [AIS has], it's also empowering.

The pivotal figure for the ESI at AIS is the Director of Research. Lynn attributed the survival of the ESI since 2014 to the Director, stating, "I really do feel that this project is maintained because of Paul, and it rests on him and his presence." Nakoa echoed this sentiment, explaining that since the Director of Research initiated the ES, he was a significant draw for the Alpine staff to apply to the program:

He was kind of known at the time that this was started as being someone that would be motivating and helpful for people that wanted to try things that were like maybe a little bit outside of the normal educational confines. He was somebody that was, I don't know, he was kind of a, I don't want to say yes man, but he was someone that was going to find ways to help you accomplish what you wanted to accomplish. And just the time to work with him, I think, was a big part of it. If you're part of this program, it means you get to work with [the Director].

Given the influential role of supportive leaders in driving the ES, future research should delve into the true impact of these leaders as a ‘lynchpin’ in fostering the factors that increase collective teacher efficacy. Specifically, investigate sustained systems for educators to engage in effective professional learning that enhances collective teacher efficacy that either survives or crumbles when leadership changes occur. Exploring the effects of leadership change would provide valuable insights for school leaders when recruiting and retaining effective staff responsible for developing and hosting ongoing teacher professional development initiatives.

### **What Other Approaches Effectively Enhance Collective Teacher Efficacy?**

The Exploring Scholars Initiative represents only a single aspect of the professional learning landscape at AIS. Exploring the impact of other professional learning programs offered at the school could provide valuable insights into their influence on the collective teacher efficacy of AIS staff. While there may be a perceived correlation between participation in the ESI and collective teacher efficacy, conducting further research on other programs could help dissect the complexities of professional learning at AIS. By examining additional programs, researchers can better discern whether a causal relationship exists between participation in specific professional learning initiatives and changes in collective teacher efficacy among staff members.

### **Concluding Remarks**

It was a serene, wintry morning, with the streets and sidewalks draped in a pristine blanket of snow. The soft glow of streetlamps cast gentle shadows across the train station, illuminating the platform in a cozy ambiance. As I stood beside the Director of Research, navigating the ticket terminal, the unfamiliar characters on the screen seemed to dance before my eyes, a foreign language that I had yet to grasp during my brief stay on campus. Despite my

limited understanding, the tranquility of the station enveloped me, punctuated only by the soft shuffling of locals bustling about in their warm coats, thick gloves, and snug hats.

As the train pulled into the station, a mixture of emotions swirled within me – apprehension for the journey ahead, excitement to return home, and a twinge of melancholy at the thought of leaving behind the enchanting atmosphere of AIS. With a kind gesture, the Director hoisted my bag onto the train, ensuring it was securely stowed away for the descent down the mountain. Before boarding, I requested one final snapshot to capture the memories forged at AIS. He graciously obliged, and as we snapped our selfie, a sense of gratitude washed over me, mingled with a pang of sadness at the thought of parting ways.

As the train softly lurched into its journey, I settled into my seat, gazing out the window in an attempt to imprint the snow-covered landscape of the mountain town into my memory. However, my reflection stared back at me, illuminated by the soft glow of the interior lights, and offered a poignant reminder of the transformative experiences I had undergone in just two short weeks. A complete stranger upon arrival, I had been embraced with open arms by the Alpine community. From educators welcoming me into their classrooms to students eagerly sharing their work, each interaction had been marked by warmth and hospitality. I had felt at home, a testament to the inclusive culture cultivated at AIS.

As the train meandered down the tracks and the sun began to peek over the horizon, I found myself pondering the essence of Alpine International School. Was it the breathtaking vistas and natural beauty that drew such remarkable individuals to its doorstep? Or did the transformative power of the location imbue everyone who crossed its threshold with a sense of belonging and camaraderie? Either way, AIS stands as a beacon of inspiration, a testament to the relentless pursuit of improvement woven into the fabric of its learning community. From the sun-

kissed peaks of the surrounding mountains to the bustling hallways echoing with students' laughter, every corner of the school resonates with the shared aspiration to transcend yesterday's achievements.

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APPENDIX A

SITE PERMISSION AND INSTITUTIONAL  
REVIEW BOARD APPROVAL

[Redacted]

30 November 2023

To Whom It May Concern:

I'm writing on behalf of Larisa GRAY, who I have invited to do research here at [Redacted] as part of our program for [Redacted]

I understand that while Larisa is on campus (January 6-19, 2024) she will be interacting with faculty members to study our [Redacted] - those faculty who work on passion projects, more or less action research as professional development. She'll be surveying, interviewing, and observing faculty members at work, I will be assisting with introductions, access, and scheduling.

We have a fairly long history of welcoming researchers to our school. I'm enthused that Larisa will be with us.

I'm happy to be contacted any time for further information, either by email [Redacted] or phone [Redacted]

Thank you  
[Redacted]



Date: 12/04/2023  
 Principal Investigator: Larisa Gray  
 Committee Action: **IRB EXEMPT DETERMINATION – New Protocol**  
 Action Date: 12/04/2023  
 Protocol Number: [2311055234](#)  
 Protocol Title: Climbing to Excellence: How the Resident Scholars Program Shapes Collective Teacher Efficacy at LAS  
 Expiration Date:

The University of Northern Colorado Institutional Review Board has reviewed your protocol and determined your project to be exempt under 45 CFR 46.104(d)(7)(1) (702) for research involving

**Category 1 (2018): RESEARCH CONDUCTED IN EDUCATIONAL SETTINGS.** Research, conducted in established or commonly accepted educational settings, that specifically involves normal educational practices that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

**Category 2 (2018): EDUCATIONAL TESTS, SURVEYS, INTERVIEWS, OR OBSERVATIONS OF PUBLIC BEHAVIOR.** Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met: (i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects; (ii) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or (iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by 45 CFR 46.111(a)(7).



You may begin conducting your research as outlined in your protocol. Your study does not require further review from the IRB, unless changes need to be made to your approved protocol.

**As the Principal Investigator (PI), you are still responsible for contacting the UNC IRB office if and when:**

- You wish to deviate from the described protocol and would like to formally submit a modification request. Prior IRB approval must be obtained before any changes can be implemented (except to eliminate an immediate hazard to research participants).
- You make changes to the research personnel working on this study (add or drop research staff on this protocol).
- At the end of the study or before you leave The University of Northern Colorado and are no longer a student or employee, to request your protocol be closed. \*You cannot continue to reference UNC on any documents (including the informed consent form) or conduct the study under the auspices of UNC if you are no longer a student/employee of this university.
- You have received or have been made aware of any complaints, problems, or adverse events that are related or possibly related to participation in the research.

If you have any questions, please contact the Interim IRB Administrator, Chris Saxton, at 970-702-5427 or via e-mail at [chris.saxton@unco.edu](mailto:chris.saxton@unco.edu). Additional information concerning the requirements for the protection of human subjects may be found at the Office of Human Research Protection website - <http://hhs.gov/ohrp/> and <https://www.unco.edu/research/research-integrity-and-compliance/institutional-review-board/>.

Sincerely,  
Michael Aldridge  
Interim IRB Administrator

University of Northern Colorado: FWA00000784

APPENDIX B

EXPLORING SCHOLARS INTERVIEW QUESTIONS

1. Can you please tell me your name and a little about your background?
2. What is your experience with the Exploring Scholars Initiative?
3. How do you perceive the level of empowerment among teachers in the Exploring Scholars Initiative?
4. In what ways does the program encourage all Alpine educators to be empowered and contribute to the overall success of the school?
5. How would you describe the leadership style within the Exploring Scholars Initiative?
6. Can you provide examples of how Alpine Administration fosters a supportive environment for both Exploring Scholars and all other teachers?
7. How is a shared understanding of effective teaching practices and instructional strategies promoted among teachers through the ES?
8. In what specific ways does the program facilitate collaboration to build a collective knowledge base among the teaching staff?
9. How are educational goals established and communicated within the ES?
10. Do you believe the ESI promotes the AIS Mission and Vision?
11. To what extent are reflective practices integrated into the daily routines of teachers within the ES?
12. Do the reflective practices built into ESI affect all teachers at AIS? If not, what reflective practices are in place for AIS teachers?
13. So the five factors of collective teacher efficacy include empowered teachers, supportive leadership, cohesive teacher knowledge, goal consensus, and embedded reflective practices. Can you think of any instances that you have not spoken to already where the Exploring Scholars Initiative promotes these factors?
14. How can these factors be further strengthened or integrated to improve the overall effectiveness of the program?
15. How can the program better support all teachers and scholars in achieving their goals?
16. Do you have any questions for me?

APPENDIX C

TEACHERS' COLLECTIVE EFFICACY SCALE

# Teachers' Collective Efficacy Scale

## Purpose and Description

This qualitative study seeks to understand how the Resident Scholar Program (RSP) at Leysin American School (LAS) affects the collective efficacy of LAS educators. This information can be applied to develop professional development programs in other secondary educational systems. This research will help to bridge the knowledge gap between theoretical connections and practical implementation of effective teacher professional learning and collective teacher efficacy.

Through participating in this online survey, you will be invited to share your perceptions. Your perceptions, along with other members of this study, will be transcribed and analyzed to develop several core themes or paradigms describing the effects of RSP. We estimate the online survey will take approximately 20 min or less. As this online survey is anonymous, your personal information will not be associated with your name or email. Data collected and analyzed for this study will be kept in a password-protected drive in the researcher's cloud-based drive

The cost for participating in this study is the time invested in participating in the survey. No compensation will be provided to participants in this study. Foreseeable risks are not greater than those that might be encountered in a classroom environment or a conversation with a colleague about one's perceptions.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please complete the questionnaire if you would like to participate in this research. By completing the survey, you give your permission to be included in this study as a participant. You may keep this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Laura Martin, Research Compliance Manager, Office of Research, Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.



Not shared

\* Indicates required question



ELECTRONIC CONSENT: Please select your choice below. You may print a copy of \* this consent form for your records. Clicking on the "Agree" button indicates that you have read the above information, you voluntarily agree to participate, and you are 18 years of age or older.

- Agree
- Disagree

[Next](#)

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[Clear form](#)

## Teachers' Collective Efficacy Scale



Not shared

\* Indicates required question

### Demographics

1. Are you a classroom teacher? \*

- Yes
- No

2. Have you participated in the Resident Scholar Program? \*

Yes

No

3. Are you currently participating in the Resident Scholar Program? \*

Yes

No

4. Age

20-29

30-39

40-49

50-59

60-69

70-79

5. Gender

Female

Male

Prefer not to say

Other: \_\_\_\_\_



### 6. Race and Ethnicity (Select All that Apply)

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Hispanic or Latinx
- Not Hispanic or Latinx
- Prefer not to answer

### 7. Highest Level of Education

- High School
- Associates Degree
- College Degree
- Masters Degree
- PhD or EdD
- Other: \_\_\_\_\_








Learning is more difficult at this school because students are worried about their safety

Drugs and alcohol abuse in the community make learning difficult for students here

Teachers in this school do not have the skills to deal with student disciplinary problems


10. Do you strongly agree or strongly disagree with the following statement?  
Please elaborate on your response.

"When it comes right down to it, teachers in this school really can't do much because most of a student's motivation and performance depends on his or her home environment."

Your answer  

11. Do you strongly agree or strongly disagree with the following statement?  
Please elaborate on your response.

"If we really try hard, teachers in this school can get through to even the most difficult or unmotivated students."

Your answer  







How much  
can teachers  
in your school  
do to help  
students think  
critically?

How well can  
adults in your  
school get  
students to  
follow school  
rules?

How much  
can your  
school do to  
foster student  
creativity?

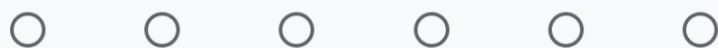
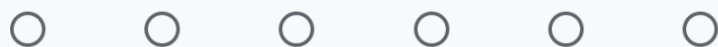
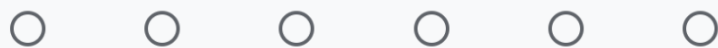
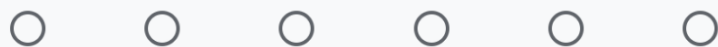
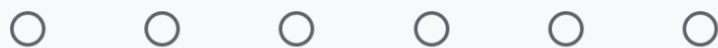
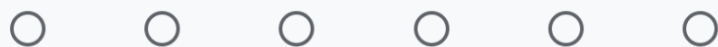
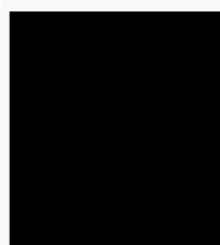
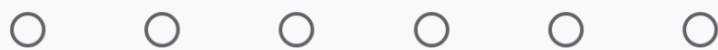
How much  
can your  
school do to  
help students  
feel safe while  
they are at  
school?

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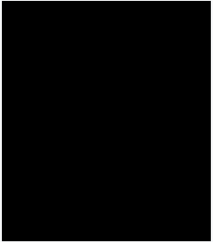
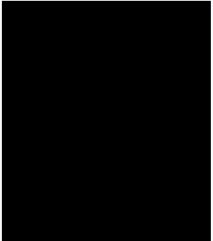
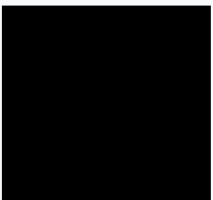
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**Thank you!**

I want to express my sincere gratitude to you for taking the time to complete my online survey on collective teacher efficacy. Your valuable insights and honest responses are instrumental in advancing this research, and I truly appreciate your commitment to contributing to my understanding of collective teacher efficacy at 

If you have any reflective thoughts or insights relative to the responses you gave in the previous sections, please feel free to share in the space provided below.

Your answer 

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APPENDIX D

EDUCATIONAL RESEARCH AT ALPINE EXPLORING  
SCHOLARS APPLICATION 2023/2024

# ████████████████████ application

## 2023-2024

Please complete this application to request support for your project. It will be considered by the ██████ steering committee. Stipend is ██████ per year.

Before you begin to prepare your application, please make an informal meeting with ██████ or a ██████ team member to outline your project.

When your application is complete and you have edited as needed, please change the answer to the final application question to "Yes" to indicate it is ready for review.

### Submission Deadline

Submission by: April 15

Notification by: May 15

██████████ will be your contact for support during the semester or year of your project, determined by the nature of your project and personal preferences.

████████████████████



Not shared

\* Indicates required question

Collaborate and reflect. Reflect and collaborate.



Applicant Name: \*

Your answer

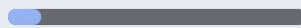


Name of your project \*

Your answer



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### Summary

Provide a summary of your project \*

Your answer



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## Goals and Measurement

Mark the theme that your project will address. \*

- teaching and learning: Innovative teaching and learning strategies
- teaching and learning: developing entrepreneurial thinking
- teaching and learning: the climate crisis
- teaching and learning: project-based learning
- teaching and learning: how uplifting experiences are created and sustained
- professional development: supporting teacher agency
- assessment: beyond tests and quizzes
- teaching and learning: play based education
- Other: \_\_\_\_\_





What NEASC Learning Principle(s) does your project best align with? \*

<https://cie.neasc.org/ace/learning-principles>


- 1- Learning Goals
- 2- Dimensions of Learning
- 3- Assessment for, of and as learning
- 4- Learning Perspectives
- 5- Learner Engagement and Autonomy
- 6- Research and Reflection on Learning
- 7- Inclusiveness of Learning
- 8- Governance and Leadership for Learning
- 9- Learning Space and Time
- 10- Learning Community

Impact this will have on students

Your answer 


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Ongoing benefit to you and 

\*  
Your answer  


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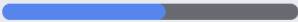
Collaboration and Connection

How will you collaborate with other faculty or others outside of ? \*

Your answer 

Is this project supported by another program of study (MA, PhD, other) you are enrolled in. \*

Your answer 

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## Personal Experience

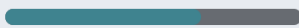
What is your personal experience within this area? \*

Your answer



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## Budget

The costs associated with the project \*

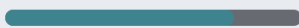
██████████ receive a ██████████ stipend. They may also request ██████████ funds to share their work (through conference presentations etc). A limited amount of funds may be used to support the project itself.

Your answer



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Additional requirements of all [redacted]

Poster depiction of the project before leaving for Summer 2024 \*

yes

Other: \_\_\_\_\_ 

[redacted] Each [redacted] is expected to schedule, prepare, and hold an \* informal talk for students and faculty.

yes

Publishing your work. Each [redacted] is expected to publish on a theme \* related to your project, either for the [redacted] site at [redacted] or for an online and/or print journal or a talk for the [redacted] podcast (with help from the [redacted] team).

yes

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### Submission for Review

Please indicate if the application is complete in the question below.

When your application is complete and you have edited as needed, please change the answer to this question to "Yes" to indicate it is ready for review.

Yes

- No. I wish to edit my responses later.
- Yes. It is ready for review.

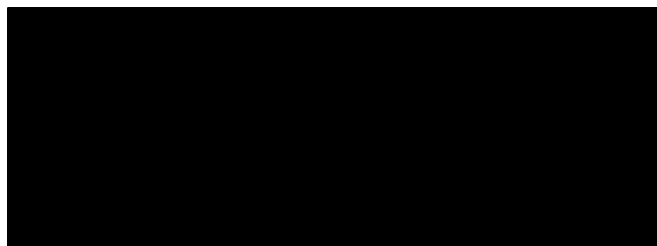
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APPENDIX E  
INITIAL SCHOLAR HANDBOOK



Version January 2022

## Purpose

The purpose of the [REDACTED] professional learning programs is to give us time to reflect on our teaching and to collaborate with each other as colleagues and professionals. Being effective in our job makes us as teachers feel good. Being the best teachers we can be directly contributes to student learning.

Participants may wonder if the observations of [REDACTED] are evaluations. They are **not** – at least not in the sense of “appraisals.” At the same time, it is too simplistic to say that observing and reflecting – alone and with others – is not evaluative. Questions like “How were you able to differentiate instruction for the ELA students?” and “What sort of scaffolding did you feel was effective to make sure all students understood the lesson?” are by nature evaluative.

So yes, [REDACTED] is evaluative. It asks participants to think critically about teaching, to look for ways to improve, to consider one’s options. It provides opportunities for others – whether supervisors a “rung higher” on the ladder or colleagues with insights to share – an opportunity to participate in a teacher’s growth.

But no, it is not an appraisal of job performance for the human resource file.

Raising our awareness is useful whether we are rookies or veterans in the classroom. None of us has been so long in the classroom that thinking about how we teach – and how students learn – is without value. You may be an experienced teacher, but the type of students at [REDACTED] may be new for you. You may be working with a new curriculum. You may have recently added new material to a class. You may be new to boarding school. You may have established great habits that work well, but to keep yourself motivated, you want to try new approaches. You might even have some bad habits. Whatever your circumstance, there is always something to learn – if you are open to learning.

While this handbook describes [REDACTED] only, it also sets the tone for future professional learning and ideally facilitates the building of collegial bonds to sustain you as a professional for your tenure at [REDACTED].

## Roles

Direct Participant. This is you. You have been asked to be part of the professional learning program because you are new to [REDACTED] (even though you are probably not new to teaching), because your department head recommended that you be part, or because you have asked to participate.

The Rest of the Direct Participants. You will interact with everyone else participating in the professional learning program. There are two large group meetings (one before the program begins, one after the six-week program ends) when you will be with everyone. There are two small group meetings, when you will be with two to three other participants for discussion and sharing of video segments. It is possible that you will observe, or be observed, by another direct



participant as well.

Supporting Teachers. You will have a third-party observation one time, possibly by a direct participant, but possibly by a teacher who is not currently participating in the professional learning program. These teachers are called supporting teachers in this document.

Substitute Teachers. In order to ease scheduling for both direct participants and supporting teachers, it may at times be necessary for a department to hire substitute teachers. This may be necessary to cover a class or to cover dorm duty, if it conflicts with small or whole group meeting time.

The Department Head. Your department head will arrange schedules and substitute teachers for you when necessary and coordinate with the professional learning program coordinator as needed. If you want to observe or be observed by your department head, or if you want to share with him or her any portions of the video recording you do, talk directly with your department head. If a department head participates in the program, as has been the case in the past, the department head will also be a direct participant. That is OK.

Third Party Observer. In addition to observing peers and being observed by peers, another faculty member will observe you once. This person will observe your class according to a pre-arranged plan directed by you. If you like, your department head can assist you in identifying an observer that is a good fit for you. Otherwise you are free to identify a third-party observer yourself. The third-party observer may be either a direct participant or a supporting teacher.

The Coordinator. The coordinator will lead large group meetings, assist with scheduling small group meetings, assist with video recording and video review, troubleshoot processes as necessary, liaise with the administration, and collect evaluation data on the professional learning program process.

### **Schedule and Commitments**

██████████ is scheduled (usually) during winter term. It takes six weeks (not counting any weeks when school is not in session).

### **Notes to the five commitments**

Whole Group Meetings – Two meetings total, once before the professional learning begins and once afterwards. The first whole group meeting is an orientation to the process and discussion of Focus Topics by the two small groups. The second whole group meeting is to evaluate the professional learning experience.

Small Group Meetings – Two meetings total. In your small group of three to four participants you will discuss your Focus Topic once during Weeks 1 or 2, and you will share clips from your videos once during Weeks 3-5. In addition to the two meetings, there is some time needed for

reading and for preparing your video clip.

Peer Observation and Discussion – at least twice: once during Weeks 1-3, once during Weeks 4-5. Department heads may wish to specify whether or not you do your observations within your department, and whom specifically you observe. After each observation, the observing teacher and observed teacher should meet to discuss the lesson. You may choose the type of feedback you are looking for, as well as any observation instrument or method. Some previous participants found that a third observation was useful.

Video Recording – at least once during Weeks 1-4. Teachers are free to do a second (or third) video if the first video is not to their liking. Assistance in setting up the equipment is available for everyone from the coordinator or from past participants familiar with the cameras. For participants using LAS Macs, the recording will download from the built-in camera to QuickTime or iMovie easily and can be stored in [Google Drive](#).

Third Party Observation – 1 observation total; once during Weeks 2-6. The third-party observer (chosen by you and perhaps your department head) will visit your classroom. The visit should be scheduled at least 3 school days in advance. A pre-observation discussion is required. After the observation, the observing teacher and observed teacher meet to discuss the lesson. Past participants sometimes chose to be observed more than once, which is encouraged but not required.

### **Large Group Meeting #1 (before the 6 week program begins)**

DRAFT AGENDA: Professional learning program

Note that the agenda may change for the actual meeting

Welcome

How [REDACTED] fits in professional learning at [REDACTED] overall

The handbook

- Roles
- Estimated time commitment
- Expectations
- Specific activities

Choosing a Focus Topic

Creating small groups

Questions and Answers

## Small Group Meeting #1

(During Week 1 or 2)

The membership of your small group will be determined by the Focus Topic you choose for yourself. Participants with the same Focus Topic will form a single small group.

There is value to working with colleagues in your own department or in other departments. The research literature suggests that working within your department may be most effective. However, if you are interested in a theme that is not interesting to your colleagues in the same department, or if you do not have a colleague from your department, you may work across departments in your small group.

[Here is a short list of suggested readings for some past Focus Topics.](#) Your group may choose alternate or additional readings if you like. Your group may also choose a different focus topic. Together as a small group you should agree on which readings your group can commit to and read before you meet for the first time. It is recommended that you read the same articles rather than doing a jigsaw reading and reporting.

By the time your small group does meet for the first time (during week 1 or 2), each member of the small group will have read the agreed upon readings and be ready to discuss them. Small groups are free to set their meetings at the time and location the members prefer.

The Focus Topic will be your focus through the 6-week professional learning program. When you observe or when you are observed, you should relate your observations (and subsequent debriefing) to your Focus Topic. For example, if your Focus Topic is working with ELA students, you should observe your colleagues with an eye to how they are instructing ELA students. Likewise, as an example with the same focus topic, when you video record yourself, you would want to watch the recording for moments of instruction and learning that relate to the instruction of ELA students.

### General Focus Topics:

Each semester before the professional learning program begins, department heads are asked to submit topic areas they feel may be of interest and importance. The coordinator finds some articles for each topic, but the small library of articles (see the professional learning program site) is by no means your only source of articles.

Recent topics include (but are not limited to):

*Problem-based learning and inquiry-based learning*

*Working with English language learners*

*Inquiry based learning*

*Working with the interactive whiteboard*

*Content-specific focus topics*

*One-to-one programs (effective use of laptops in the classroom)*

*Students with learning differences*

You may start a new topic! Please send, if you would, articles you find to the coordinator for inclusion on the professional learning website.

### Content-specific Focus Topics:

Your department head may suggest that you also choose a focus topic directly from your professional field. If there are two or more individuals from the same department, you may pursue that focus topic as your only topic (and you will form a small group together). If you are the only individual from your field, you may choose a content-specific focus topic, in collaboration with your department head, as an additional focus topic. An extra content-based focus topic is not required and is at the discretion of your department head.

### **Observing others**

Twice during the six-week program you are asked to observe a colleague. The following are suggested guidelines:

At least one of these observations should be of a colleague in your department. Of the two observations, at least one should be of teachers not in your cohort of teachers in the professional learning program, simply because debriefing the observation will add an additional hour to the overall time commitment.

You should expect your department head to advise as to which teacher you might best observe, and perhaps which particular class or classes.

### *Classroom Observation Protocol*

Often as teachers we are so busy with our own classes that we have very little chance to observe

and learn from our colleagues. This is unfortunate, since our colleagues in the rooms right next door to us have experiences and ideas that would be very helpful to us ... if we just had time to observe them in action.

Since our opportunities to observe our colleagues are relatively limited, it is important that we get as much out of each opportunity as possible. To that end, please follow these general guidelines prior to, during, and after an observation.

#### *Prior to the observation*

- Talk (or email) with the teacher you are going to observe. Tell him or her your Focus Topic for your professional learning. Ask the teacher you are going to observe to address how he or she deals with issues related to your Focus Topic. If the Focus Topic is not relevant for the teacher you are going to observe, choose a different teacher!
- Ask for the teacher's lesson plan, whether detailed or not, and any materials the teacher is going to hand out during the lesson.

#### *During the observation*

- Arrive 5 minutes before class starts.
- Bring the teacher's lesson plan and any materials you received beforehand with you. If none were sent to you, ask for them now.
- Take notes during the lesson, looking particularly for interactions that relate to your Focus Topic.
- If it is OK with the teacher you are observing, move about the room to observe what students are doing.

#### *After the observation*

- Go over your notes and clarify any areas that might not be clear to you before your memory of the lesson fades.
- Write down two or three questions and/or discussion topics about the lesson to bring up with the teacher you observed.
- Schedule a meeting (sooner is much better than later; but no later than the timeline in the professional learning program schedule calendar) with the teacher you observed to ask your questions and to talk about the lesson.

#### *Observation Forms*

There is no best format for taking notes during an observation. A basic sample observation form is on the next page for you to use if you like. Make multiple hard copies of the form if you'd like to take notes by hand, or cut and paste the form to make a digital copy.

If you or your department head would prefer that a different observation form be used, please consider using that form. If you'd like assistance with finding a different or specific observation form, please contact the program coordinator.

There are a large number of observation instruments to help answer specific questions. See for example Sullivan, S. and Glanz, J. (2013). *Supervision that Improves Teaching and Learning*. (Available from the professional learning coordinator.)

Focus Topic \_\_\_\_\_  
Class \_\_\_\_\_  
Date \_\_\_\_\_

Number of students \_\_\_\_\_

What are the students doing?

What is the teacher doing?

Questions for the teacher during the debriefing.

## Observing yourself teaching – Video clips

Students spend a great deal of time observing their teacher, but teachers rarely get the opportunity to observe themselves.

The thought of observing ourselves can be disquieting. Oftentimes in pictures or audio and video recordings we don't look or sound at all like we think we do. It can be uncomfortable.

However, if we want to see ourselves as our students see us, we do need, every now and then, to watch and listen to ourselves.

The video recording portion of the professional learning program acknowledges that video recording can be uncomfortable for some teachers and therefore needs to be handled in a respectful and teacher-controlled manner. We will do everything we can to ensure that the benefits of video recording ourselves outweigh the anxiety we might feel about video recording ourselves.

Note that you are in charge of the video recording. You decide whether or not others view a specific video recording and you decide what part of the video recording you will share with others. Also, unless you give your permission, no video recordings will be shared beyond your small group meeting.

### *Scheduling video recordings*

Please contact the program coordinator if you need assistance with making recordings using your laptop. If you would like to use a video recorder, please also contact the program coordinator.

On occasion, it may be possible to have someone make a recording for you. This allows the greatest flexibility, but of course there is a time demand on an additional person. Please don't attempt to have a teacher who is observing you also run the video camera. The quality of the observation will suffer for it. Likewise, the third party observer cannot run the video and observe your class at the same time.

Once you have a recorded class, you will likely be looking at it in the program iMovie. With a short tutorial, you can also edit your video. If you'd rather not edit, you may keep the entire video and simply select the portion you want to show to your small group – it's as easy as clicking on the portion of the recording where you want it to start and clicking stop when you want it to stop.

Our goal with video recording is to talk about teaching – not to frustrate ourselves with learning new software applications!



## Small Group Meeting #2

### Sharing video clips

During your second small group meeting, you will share video clips from your own teaching and watch video clips from the classes of your colleagues. Each of you will be choosing which video clips you share. The video clips will relate to your focus topic and serve as springboards for conversations about the focus topic itself.

There are considerations to keep in mind when preparing your own video to share and when responding to another video that someone has shared with you.

### *Preparing Videos*

You will be recording and reviewing a whole lesson, but only sharing with your small group a short clip, or clips, totaling no more than five or ten minutes.

### *Video Recording*

How you choose which five or ten minutes (or which two or three sections that compose a total of approximately five or ten minutes) to share is up to you.

Here are some general pointers on video recording you and your class:

Schedule your lesson for video recording EARLY. If you don't like your video, you will have plenty of time to make a second video. If for some technological reason the video recording doesn't work, you will have plenty of time to redo it.

If you have time, watch the video in its entirety before deciding which clips to use for your small group discussion.

Pick a section (or sections) that is (are) related to the Focus Topic you have chosen to work on with your small group.

If you are nervous about sharing a video clip of yourself, ask a friend you trust to watch parts of it with you to help you pick out the strongest segment or segments, not the weakest! Most likely your friend will be much more charitable about the video than you yourself might be!

If when reviewing your video you notice a particularly good teachable moment or a poignant missed opportunity, consider sharing that "decisive moment" with your colleagues.

If something didn't go well but you would like to share it for discussion about why it didn't go well or what you might have done differently, that is fine. You will not be evaluated on the video clip. Instead, you are being encouraged to reflect on your (and your colleagues') teaching.

If there is nothing in particular on your video that you want to share, or if the lesson didn't go well and you aren't comfortable sharing clips from that particular class period, consider video recording again, another day. There is no problem with making multiple video recordings, assuming the video recorder is available.

For each of the video clips you are going to share:

- Prepare a short introduction to the video in which you set the context;
- Distribute any hard copy materials that are used by you and/or students in the video; and
- Ask your colleagues to respond to one or two specific questions you have about the video clip.

### *Responding to your colleagues' video clips*

How you respond is of course up to you. Please consider, however, that sharing a video of oneself with colleagues requires trust and a certain level of comfort. Be conscious of building trust and maintaining comfort when you are responding to a colleague's video clip or clips. Your job is to support and to give helpful feedback, with a constant eye to motivation! Above all, proceed respectfully!

Here are some tips:

Much of the learning from video recording has been accomplished before your colleague ever shows you the video. Your colleague has viewed the video, re-viewed the video, chosen specific clips, wondered about them, perhaps worried about them, and prepared an introduction to them. Your comments build on learning that has already taken place.

Remember to respond to and talk about the video clip and the teaching and learning in that video clip. It is tempting to relate a clip of teaching to your own teaching and before you know it, you are talking about yourself. There will be time to talk about your teaching, too – just not in the context of someone else's video clip!

### **Letting others observe you: the third-party observation**

You are asked to be observed by a third party once during Weeks 2-5 of the program.

With videos you can directly observe yourself and your students in the classroom. With the third-party observation (the first party is you, the second party is your students, the third party is the observer in your classroom) you can get feedback about the teaching and learning in your own classroom from someone beside you.

You should, perhaps best in collaboration with your department head, select the person who is in your opinion the best qualified to observe you and discuss your lesson with you. It is up to you and your department head to schedule with observers at a time that works for that observer. Substitutes (for the supporting teacher who is observing you, if they need one) are paid for by

professional learning program funds.

When you ask someone to observe, be very specific about what exactly should be observed. Sometimes teachers will ask to “observe everything; I like all advice.” It may be true that a teacher is open to any and all advice, but by not pinpointing exactly what to observe, less self-reflection has gone into the decision regarding what aspects of teaching might most benefit from observing. In other words, the person who should be in control of the observation is the person being observed, not the person observing.

Here are some hints to make the observation as worthwhile as possible.

#### *Before the observation*

- Set up the observation well in advance.
- Give your observer the lesson plan and any handouts for the lesson.
- Let your students know that there will be an observer in class.
- Write down two or three concrete items that you would like your observer to look for and comment on (related to your focus topic).

#### *During the observation*

- Introduce the observer to the students and give the students the ten seconds they need to say hi or wave. Then proceed as if the observer isn't there.
- Refrain from debriefing the lesson as it is happening. In other words, don't stop the flow of the lesson to direct your attention to the observer in order to comment on the lesson.
- If you use materials during the lesson that the observer doesn't already have, give the observer a copy of the materials just as if the observer is another student in the room.

#### *After the observation*

- Thank the observer for coming to your class!
- Schedule a time to debrief the lesson, if you cannot do so immediately, within one or two days from the lesson. Discuss the concrete items you gave the observer.
- Be open to hearing alternate interpretations of the teaching and learning in your classroom. In other words, focus on listening to the observer, not preparing in your mind how you are going to respond.
- Look for one theme in the debriefing session that you can try immediately with your students and one theme that is significant enough to mull over for a while.

### **Large Group Meeting #2 (after the 6 week program ends)**

DRAFT AGENDA: Professional learning program

Note that the agenda may change for the actual meeting

Welcome

Congratulations

Debriefing the experience

Professional reading

Being a good observer

Being a good listener to feedback from others

Learning from video

Where to go from here

Questions and Answers

### Use of Recorded Video

Only with your active consent will any video record that you make of your own teaching be used beyond your small group meetings in the context of the professional learning program.

With your active consent, as noted below, [REDACTED] may use your video recording in additional contexts. Those contexts are listed below.

[REDACTED] may use my video (or my edited clip(s) of my video) for:

\_\_\_\_\_ making training videos share via the website (teachers are unnamed);

\_\_\_\_\_ an example of the professional learning program offered at [REDACTED] at education conferences.

Please initial one or both of the options above, if you give permission for [REDACTED] to use your video.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

Thank you!

## Keeping track of the required components of the Professional Learning Program

Component	Date Completed
Whole Group Meeting 1	
Small Group Meeting 1	
Teacher Observation 1	
Teacher Observation 2	
Being observed 1	
Observing yourself with video 1	
Small Group Meeting 2	
Whole group meeting 2	

APPENDIX F  
THURSDAY SKI NIGHT INVITATION

From: [REDACTED] <[REDACTED]>

Date: Mon, 8 Jan 2024 at 11:01

Subject: Thursday nights

To: [REDACTED]

Hello everyone,

Hopefully you are all over the shock of being back to school, holidays are over. But at least this year the white stuff is covering the ground.

[REDACTED], [REDACTED] and myself are planning on running the Thursday night evening ski, much as we did last year.

For new staff and those with poor memories ([REDACTED] is getting no younger) every Thursday during ski season there is an event at one of the mountain huts above town. Usually [REDACTED] but sometimes [REDACTED]. We're even hoping to introduce the [REDACTED] one night this year.

In the past this has run as a race and [REDACTED] will keep that element for those that are interested. If you want to guarantee a win, all you have to do is invent a category that no one else will be doing. We've had the fastest; mountain biker, telemarker, person on crutches, person called John and many more.

Most people walk or ski up at a leisurely pace to enjoy a drink and/or a meal at the hut before returning at a reasonable time to be fresh for teaching the next day.

I'll save the usual details of [REDACTED] because this week we would like to invite everyone to come up to [REDACTED] to start the season off in style. Because the hut is unmanned and we are going to be doing the cooking and cleaning ourselves we are keeping it very simple. [REDACTED] will be making her world famous soup (meat and gluten free) to provide sustenance and there is beer and wine up at the hut. To save on dishes we would really appreciate it if you can bring your own bowls up, any one providing their own dish will get a discounted rate on the soup.

I almost forgot to mention that there will, of course, be prizes. The highly coveted '[REDACTED] award' for stylish entry into the hut and the 'cleanest teeth award' to name but two. Hopefully I can get hold of some good gifts or we will just see what I have left over in my ski bag.

If you do want to eat then please use the sign up form before lunch time tomorrow so we know roughly how much soup to make. If you just want to come for the lols and a drink then no need to sign up. If you want to sign up after that then send me an email directly.

Something to get you motivated.

Thanks

[REDACTED], [REDACTED] and [REDACTED]