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ASSISTING STUDENTS IN DEVELOPING COMMUNICATION SKILLS NEEDED  
FOR SUCCESSFUL COLLABORATIVE LEARNING

by

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A Project and Presentation Submitted to the Faculty of the  
DEPARTMENT OF PROFESSIONAL EDUCATION

In Partial Fulfillment of the Requirements  
For the Degree of

MASTER OF SPECIAL EDUCATION

BEMIDJI STATE UNIVERSITY  
Bemidji, Minnesota, USA

May 9, 2019

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## ASSISTING STUDENTS IN DEVELOPING COMMUNICATION SKILLS NEEDED FOR SUCCESSFUL COLLABORATIVE LEARNING

Jennifer M. Kaufenberg

Middle School Language Arts educators are often tasked with meeting the needs of a diverse range of learners. Best Practice requires teachers to have inclusive classrooms where all students take part in the learning process, despite individual academic abilities. This literature review and capstone project form a guide to help teachers develop ways to maximize collaborative learning in a flexible, inclusive classroom, while helping them improve communication skills. It is responsibility of education as a whole to ensure that students are exposed to a setting that is founded on meeting the needs of all students; however, young learners will not benefit from a student-centered environment if they are not using strong communication skills. Together the literature review and capstone project provide the evidence necessary to justify the importance of creating collaborative learning resources that will help enhance student communication skills, regardless of ability.

*Keywords:* flexible classroom, collaborative and cooperative learning, differentiation, inclusive classroom, middle school, student-centered learning, self-behavior monitoring, sociocultural theory, constructivism, fail forward.

## ACKNOWLEDGMENTS

A personal thank you to all of the educators and administrators who have supported my educational journey and who have encourage me to inspire others. Thank you to each student who challenges the norm and continues to ask questions. Above all, thank you to my family for standing by me and keeping me moving forward - no matter what. In all that I do, I hope to inspire others to open their minds and see the world beyond the classroom - to the amazing places they can go and the great people they can become.

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## Chapter 1: Introduction

### Statement of the Problem

In a developing world that demands high levels of critical thinking, problem solving, strong communication skills, and resourcefulness, it is equally important that all students are exposed to experiences that fine tune executive functioning skills, as well as foster initiative and communication. Unfortunately, our educational system is stuck in a pattern of turning students into adults who are consistently being “prepared” for the next test, assessment, or grade level ... only to find out after graduation that they don’t really know what their passions are (Spencer & Juliani, 2017, p. 305). The educational system is at a pivotal point where it is essential that educators create opportunities within the classroom, ensuring all student needs are met, while moving students towards mastering communication skills they need to succeed in the developing world.

Best Practice requires teachers to have inclusive classrooms where all students take part in the learning process, despite individual academic abilities. According to the *Individuals with Disabilities Education Act* (IDEA), students with disabilities have the right to an education in the least restrictive environment (LRE). In order for an inclusive classroom to meet the needs of all students, Villa and Thousand (2003) confirmed that current theories of learning, such as multiple intelligences and constructivist learning, as well as differentiated instruction combined with partner and activity based learning effectively support inclusion.

“Learning is a process of sharing, engaging with, and responding to new and different ideas” (Stott, 2018, supporting quiet students section, para. 4) and student-centered learning cultivates learning at the core. Unfortunately, as the educational system

moves from teacher-centered classrooms to student-centered learning, many students are being pushed into collaborative learning scenarios where they lack the communication skills required to effectively learn together. The flexible, middle school Language Arts classroom setting is a crucial foundation for meeting the needs of all students; however, young learners will not benefit from a student-centered environment if they are not using strong communication skills. It is essential to create a collaborative learning environment where necessary communication skills can be introduced and practiced.

This literature review will provide the support necessary to justify the importance of creating resources for students to use during collaborative learning in a flexible environment. Resources will help enhance learning for all students, regardless of ability; furthermore, they will assist students in meeting or exceeding learning targets and objectives. In addition, the resources will provide a base for teachers to assess student communication skills and overall growth.

### **Statement of Intent**

The intent of this literature review is to compile evidence that supports the need for resources for students to use while working in collaborative learning scenarios. It is important to understand that flexible classrooms, differentiated instruction, and cooperative learning in an educational system are not enough if students do not have the skills to communicate effectively. All learners need practice within a safe and secure environment in order to build the skills required to compete within a fast-paced society. Middle school students who work together using their strengths to support learning through questioning, informal discussions, and peer feedback, fine tune the executive functioning skills required to be successful in high school and beyond.

This literature review details the importance of creating a set of resources for students to refer to and use during collaborative activities, discussions, and small group projects. The resources include steps for building and establishing group roles, discussion prompts, questioning guides based on depth of knowledge levels, thoughtful listening criteria, and a conflict resolution guide. Adding these student resources to the flexible classroom will help teachers foster student ownership in education, as well as increase student self-behavior monitoring.

### **Significance of the Applied Capstone Project**

As a secondary Language Arts and Special Education teacher, it is essential to develop an inclusive classroom that meets the present and future needs of all students. The International Labour Office (ILO) indicated in a G20 Training Strategy document, that lifelong learning is critically dependent on a strong integration between education, training, and work (2010, p. 28). Middle school Language Arts classrooms have a unique opportunity to help students build background knowledge and to provide exposure to the world by creating shared experiences through both fiction and nonfiction texts. At the same time, students develop real world reading, writing, and communication skills through cooperative learning, differentiated instruction, and cultural enrichment.

Students need a learning environment that allows them to start developing a deeper understanding of their personal selves, while learning about the world beyond the classroom walls. Providing students with opportunities to develop and fine tune communication skills, while stimulating critical thinking and problem solving abilities are essential components needed for students to take ownership in their education. In order to meet the needs of all middle school students, educators should strive to develop

student-center, classrooms that include a focus on student needs while moving towards mastery of essential skills required for success. This literature review, combined with the student collaboration resources, will assist educators in training students to work effectively with others in order to learn and build communication skills that can be applied across content areas and the ever-changing workforce.

### **Methodology of Conducting the Review of the Literature**

This literature review begins with the idea that educational structure is shifting from teacher-centered to student-centered learning and verifies that the flexible classroom is at the center of this shift. Key issues are identified through review of literature that supports student-centered classrooms built around collaborative learning. Review of literature on communication and collaboration will support the use of resources necessary to help build skills required for students to succeed in high school and in a postsecondary world that requires high levels of human engagement. In order to maintain high levels of academic integrity, the literature gathered for this review will consist of published books used in professional academic settings; peer reviewed journals, articles, and studies found through ERIC and PubMed Central; as well as, articles and journals gathered through BSU database searches. All sources will be academically focused, and peer reviewed articles will be researched first. Additional research will be completed by observing classrooms currently practicing collaborative learning, including on-site observations and recorded videos published through academic outlets. The combination of materials and diverse mediums used for this literature review will support student use of premade resources during collaborative learning scenarios.

### **Limitations and Assumptions**

This literature review and capstone project will focus on the middle school Language Arts classroom where the necessary communication skills required for students to work effectively in collaborative learning scenarios are being modeled and taught. The narrow scope will allow for specific examples and practical solutions that can be adapted to high school Language Arts classrooms, as well as other content areas.

It is assumed that middle school students, across all content areas, can benefit from flexible classroom settings that focuses on cooperative small group learning. Furthermore, it is assumed that providing students with group roles and resource materials (which includes discussion and higher level questioning prompts, as well as conflict resolution guides), will help students manage their personal anxiety and uneasiness. The core assumption states that in order for the student resources to be effective, the flexible, inclusive classroom must foster student collaboration that revolves around respect and highlights individual group member's abilities and contributions.

### **Definition of Terms**

*Activity Setting:* Activity settings are the organizational structures through which society acts and through which socializes its members (Tharp, Estrada, Dalton & Yamauchi, 2000, p. 9).

*Collaboration:* Collaboration is a philosophy of interaction and personal lifestyle where individuals are responsible for their actions, including learning and respect the abilities and contributions of their peers. In all situations where people come together in groups, it suggests a way of dealing with people, which respects and highlights individual group members' abilities and contributions (Laal & Ghodsi, 2012, p. 486).

*Collaborative Learning:* Is an educational approach to teaching and learning that involves groups of learners working together to solve a problem, complete a task, or create a product (Laal & Ghodsi, 2012, p. 486).

*DoK:* Depth of Knowledge is a common measure of rigor used extensively at the state level to align assessments with state content standards (Baughamn, Carlock, McGaugh & Walkup, 2009, p. 1).

*Excellence:* Excellence means the achievement of each student's full potential. Few students achieve their full potential in classrooms that are part of the common tradition. Reform for Excellence should mean a tide on which all boats rise, whether they are gifted, challenged or average (Tharp, Estrada, Dalton & Yamauchi, 2000, p. 3).

*Fairness:* It is generally agreed that "equality," in the sense of just-like-the-majority, was not fair, did not adequately promote the value of Excellence in student academic learning, and has not produced Inclusion or Harmon. Fairness has since been sought through "equity," which accepts equivalence, understood in more complex ways than merely as sameness, which recognizes that in shared schools, equity means that changes must occur for everyone, if everyone is to learn (Tharp, Estrada, Dalton & Yamauchi, 2000, p. 3).

*Fail Forward:* The framing of failure through a "growth mindset." Mitigating student's fears of failure and even having them embrace the idea that they can "fail forward." Viewing the word fail as an acronym that stands for "First Attempt in Learning" (Miller, 2015, p. 2).

*Inclusion:* Including all students in the school's social and instructional opportunities. Inclusion as a reform theme extends beyond the school building ... understanding that everyone has a stake in schooling, and everyone should have access and a voice. In the

schools of the common tradition, access to instructional opportunities has been by no means equally distributed across all students. Those who were “tracked” into “trade,” “industrial,” or “commercial” curricula were not offered higher-level academic subjects; special education students were excluded from contact with (or even observation of) their mainstream peers; children who were speakers of languages other than English were immersed in a new language where they could swim or drown (Tharp, Estrada, Dalton & Yamauchi, 2000, p. 4).

*Sociocultural Theory:* Sociocultural Theory is essentially a theory of development (Vygotsky 1978): development of capacities, individuals, institutions, communities, and cultures (Tharp, Estrada, Dalton & Yamauchi, 2000, p. 9).

*Webb’s DoK Level 1:* Requires students to recall, observe, question, or represent facts, simple skills, or abilities. Requires only surface understanding of text, often verbatim recall (WCEPS, 2017, p. 1).

*Webb’s DoK Level 2:* Requires processing beyond recall and observation. Requires both comprehension and subsequent processing of text or portions of text. Involves ordering, classifying text, identifying patterns, relationships, and main points (WCEPS, 2017, p. 1).

*Webb’s DoK Level 3:* Requires students to go beyond text. Requires students to explain, generalize, and connect ideas. Involves deep inferencing, prediction, elaboration, and summary. Requires students to support positions using prior knowledge and evidence and to manipulate themes across passages (WCEPS, 2017, p. 1).

*Webb’s DoK Level 4:* Requires complexity at least at the level of DOK 3 but also an extended time to complete the task, such as conducting a research project over many weeks. A project that requires extended time, but repetitive or lower-DOK tasks is not at

Level 4. May require generating hypotheses and performing complex analyses and connections among texts (WCEPS, 2017, p. 1).

### **Summary Statement**

The academic shift to student-centered learning requires instruction that is built around student needs and incorporates cooperative learning within a flexible classroom setting, ultimately increasing student executive function and communication skills. Every student needs to develop critical thinking, problem solving, and communication skills in order to succeed in a world that requires initiative, persistence, and innovation. Building a student-centered culture in classrooms is challenging because our American educational system was founded on a deeply- rooted, teacher-centered system. Every teacher has “a test, a curriculum map, a bell schedule, and a set of programs that often push compliance over empowerment.” (Spencer & Juliani, 2017, p. 333). If you ask an educator or school administrator, does the standard public school mirror the real world? Many would respond that it should; unfortunately, there is not enough time in the school day to cover everything and still meet all of the standards. Spencer and Juliani’s (2017) research illustrated that for 12 - 13 formative years, teachers and students spend an average of 6.64 hours each day, 180 days each year, in school. However, the current structure of compliance - for the fourteen thousand hours students spend in school - does not mirror what natural learning looks like (p. 254). Ultimately, the crucial question is, what are students doing in their classes and how can we better use this time to build skill sets that help them succeed in high school and beyond?

According to Spencer and Juliani (2017), we only need to change one thing. “We need to shift our mindset from compliance (students must follow our rules) and

engagement (getting kids excited about our chosen content, curriculum, and activities) to empowerment” (p. 347). The theory of moving from compliance and engagement to empowerment is an uneasy highway for many educators and learners to travel. It is much easier to play the “game” of school and wait for others to figure out what and how to learn. This is where the concept of flexible, inclusive classrooms, differentiated instruction, and cooperative learning meet the classroom of compliance and worksheets. Inevitably, students need to learn reading and writing skills. Furthermore, if they are to be successful after their school years, they need to develop communication, critical thinking, and problem solving skills. When the traditional educational pathway meets the empowerment highway, teachers and students will come to a point in the middle that provides cooperative learning ventures that allow students to jump onto the road that takes them to where they want to go.

As we shift to student-centered learning it is imperative that students have the resources and tools to effectively communicate with each other. Lacking communication skills combined with ineffective conflict management creates a barrier to the success of the student-centered classroom. It is essential that students have access to tools and resources to help them fine tune communication, problem solving and collaboration skill sets. Helping students identify their strengths and weaknesses while building an understanding of questioning and depth of knowledge is key to building strong successful lifelong learners. This literature review sheds light on the flexible, inclusive classroom that is student-centered and provides practical resources for teachers and students to use during a variety of collaborative learning scenarios.

## **Chapter 2: Review of the Literature**

Imagine. A classroom with rows of student desks facing the teacher's desk, an open space for the teacher to stand and lecture before a PowerPoint presentation. A quiet room of students taking notes, independently working on worksheets, and waiting for the bell to ring to move on to the next class and repeat. Stale uninviting classrooms of the not so distant past require conformity and compliance. Does this environment meet the needs of the modern student? How do we foster development of critical thinking, problem solving, and communication skills to insure that students succeed in a world that requires initiative, persistence, and innovation?

Teaching the whole student is an essential part of working with adolescents, especially those with learning and behavioral challenges. There is no one best practice used to achieve this goal; however, starting with basic communication and collaboration practices will help lay the foundation for a respectful, safe and productive middle school language arts classroom. Collaborative learning epitomizes the social constructivist perspective on learning (Vygotsky, 1978). In order to better understand how adolescents communicate within a flexible language arts classroom, it is important to understand how teachers develop an inclusive setting, what learning strategies are used, and what are student expectations. This understanding will provide a baseline to review and analyze adolescent communication during collaborative learning scenarios and create communication resource material.

It is important to realize that creating a flexible, inclusive classroom is more than a simple transformation from rank and file seating to a variety of seating options. A flexible classroom requires flexibility with instruction, cooperative learning and active

involvement. A classroom that provides opportunities and experiences that fine tune executive functioning and communication skills; as well as, fosters initiative within all students, from those with cognitive delays to those who are often labeled gifted and talented. Equally important, it is essential that students build effective communication skills. In order to build effective communication skills, educators need to help students establish norms (Learning Sciences International, 2017). A set routine with norms and basic rules for discussion can help students work together in a collaborative setting. Using a small group model with roles for each member will help keep students focused and on task. Giving students' roles and responsibilities will empower them to be leaders in the classroom (Perez, 2014, p. 8), while enhancing their communication skills.

Preparing students for the developing world that demands high levels of critical thinking, problem solving and resourcefulness is the main goal of cooperative learning in an inclusive classroom. In order for groups to be truly productive, the right structures and circumstances need to be created to show how productive group work is a necessary part of good teaching in inclusive classrooms (Perez, 2014, p. 131). Fostering a flexible classroom with successful cooperative learning that functions independently requires stability and consistency. "Carefully designed procedures and routines are of paramount importance in a caring, inclusive classroom" (Perez, 2014, p.8).

Armed with resources that help guide collaboration, students can break through barriers that hinder the cooperative learning process. In addition to discussion prompts, questioning guides, and thoughtful listening criteria, students need practice in the areas of conflict resolution and accepting academic challenges. Strategies described by Perez (2014) described "the most productive and learning-conducive classrooms are those that

are student-centered and yet high in reasonable challenge” (p. 208). It is important to understand, that conflict is an essential part of learning and growing as a group and as an individual. Conflict used in a positive manner can foster challenges that force groups to think outside of the box, discovering solutions for problems that otherwise may never be solved. Collaborative learning is ultimately effective when students have a deeper understanding of their own strengths and weaknesses, allowing all students to contribute to the group process. Perez (2014) clarified that differentiation through modification strategies will not only enhance the students’ strengths and interests, it will help them compensate for their weaknesses, which would compromise their success in an inclusive classroom (p. 120).

At the same time, students need to develop questioning skills and understanding of the four levels of complexity that measure student’s depth of knowledge. Without this knowledge and understanding, risk taking challenges will fizzle out before true growth can happen. Bonwell and Eison (1991) identified that “students learn more effectively by analyzing, discussing, and applying content in meaningful ways rather than by passively absorbing information; therefore, students benefit when instructors utilize instructional strategies that promote active engagement” (Kennedy, 2007, p. 183).

Similar to Blooms Taxonomy Levels, Norman L. Webb (2002) compiled Depth of Knowledge (DoK) levels for four content areas. The four levels put into perspective the what and how students are learning. Providing students with a road map of the DoK during learning activities helps them identify when they can assist in the learning process or seek out assistance to guide their personal learning. The level of student ownership in

their education is an internal factor; however, fostering a classroom culture that is comfortable, safe, secure, and centered around student learning is where it all starts.

### **Building a Flexible, inclusive Classroom**

Walking into a middle school flexible classroom for the first time may invoke the thought that it resembles the layout of an elementary class more than that of a secondary classroom. Desks are often replaced with tables and multiple arrangements of different seating areas that foster student collaboration. In addition to a variety of seating options, the individual spaces provide students with choices, allowing them to determine the best location to maximize their personal learning as well as communicate with peers. Standard desks situated in rows do not foster open communication and collaboration (Markle, 2018). Evidence provided by Tharp (2018) confirmed that “teachers need to create classrooms in which achievement-endorsing attitudes, values, and behaviors are developed within the everyday activity settings of the classroom” (p. 92). “The classroom environment should mirror what students will encounter in their future careers, and collaboration, problem solving, and meaning making are at the forefront of most job descriptions” (Markle, 2018).

In a flexible classroom, the line is often blurred to where the front of the room is or where teacher and student spaces end and begin. It is not necessary that the teachers give up their teacher’s desk or personal space; however, it is essential that the teacher becomes an active participant within the flexible classroom activities and the classroom community as a whole. Markle (2018) indicated that students took an active role in their educational journey when provided with a choice as small as where they preferred to complete an assignment. Darby (2017) noted that “students know how they learn best.” It

is important to give students credit for the knowledge they bring to the classroom, and make them partners in the creation of a positive instructional climate (Darby, 2017).

The Charlotte Danielson Framework for Teaching provides a roadmap to creating the ultimate classroom environment. Under Domain 2: The Classroom Environment at the distinguished level can be seen as the following:

“Classroom interactions between teacher and students and among students are highly respectful, reflecting genuine warmth, caring, and sensitivity to students as individuals. Students exhibit respect for the teacher and contribute to high levels of civility among all members of the class. The net result is an environment where all students feel valued and are comfortable taking intellectual risks” (Danielson, 2017, p. 35). See Table 7 on page 43 for complete Charlotte Danielson Framework.

The community concept is at the core of the flexible classroom setting, allowing teachers and students to maximize academic achievement through the process of shared values, goals and standards. According to Tharp (2018), “Classrooms in which all participants, including the teacher, create a common classroom culture of Excellence, Fairness, Inclusion, and Harmony, by working and talking jointly on meaningful products will have maximum potential for developing achievement-endorsing values and behaviors among all of their members” (p. 92). Successful cooperative learning environments take time to establish. The classroom culture needs to revolve around activities that keep students busy cognitively while students embrace the importance of learning. It is essential that the teacher conveys high expectations for learning for all students and insists on hard work; students assume responsibility for high quality by initiating

improvements, making revisions, adding detail, and/or assisting peers in their precise use of language (Danielson, 2013, p. 39). Student evidence collected by Halley, Heiserman, and Eshleman (2013) explained that during small group presentations “students appreciated being challenged both to learn the material and to take ownership of it” (p. 8).

Achieving a space where virtually every student is intellectually engaged in challenging content seems essentially impossible for one teacher to manage alone; however, after establishing the core culture of a flexible classroom the traditional dynamic between teacher and student begins to change. Empowering students to take ownership through collaborative learning, identifying strengths and weaknesses, and building quality relationships sets up diversified roles and leadership within the classroom. “With a wide variety of goals and configurations, students can more readily take on roles of collaborator, teacher, and leader, rather than adhere to the traditional role of student” (Tharp, 2018, p. 95). This allows the teacher to assume a variety of roles that are outside of the typical authority figure, ultimately empowering students by increasing student opportunities to make decisions regarding academics, activities and assessments.

Developing an inclusive classroom that meets the present and future needs of all students is more than furniture and special seating areas. Students need a learning environment that allows them to start developing a deeper understanding of their personal selves, while learning about the world beyond the classroom walls. In order to meet the academic needs of all students in the classroom, teachers need to insure that self-efficacy is being fostered and developed in the classroom. Perez (2014) confirmed that self-efficacy is a pivotal force in how students approach goals, tasks, challenged and

assignments in the classroom (p. 2). Using best practice from current teaching philosophies and educational theories, a flexible classroom with differentiated instruction and cooperative learning opportunities ultimately meets the social, emotional, and academic needs of all students, ensuring their future success. Vygotsky (1978) emphasized the importance of others, including teachers, as mediators of learning. He claimed that learning originates from internalizing meaning during social interaction while using relevant “scaffolding” within the “Zone of Proximal Development” (Hernandez, 2012, p. 805). Understanding differentiated instruction and flexible, inclusive classrooms, as they relate to providing students with opportunities to take ownership in their learning, is key to establishing a learning environment that facilitates students developing the communication skills needed to accomplish their secondary and postsecondary goals.

### **Cooperative Learning**

Learning Sciences International (LSI, 2018) research data disclosed the skills that employers want the most 1) ability to work in a team structure, 2) ability to make decisions and solve problems, 3) ability to communicate verbally with people inside and outside an organization, 4) ability to plan, organize, and prioritize work, and 5) ability to obtain and process information (p. 6). In order to prepare students for the future, students and teachers alike need to develop a deeper understanding of student strengths and weaknesses. Differentiate instruction that is built around student needs is the core of successful cooperative learning. Productive group work, as supported by Perez (2014), is an essential tool to extend and enrich the learning of students and to meet their individual needs (p. 131). Cooperative learning does not mean that students are left to their own

devices to learn daily goals and objectives. Cooperative learning takes on many forms, from whole group read alouds and discussions, to small group activities and conversations, to working in pairs and even independent shared projects. “How teachers present the information, engage students, select materials and tasks, interact with students, and provide opportunities for flexible grouping affects the total learning environment in differentiated classrooms” (Perez, 2014, p. 131).

The key is that students are taking ownership in each activity with everyone in the classroom sharing their thoughts and ideas, along with providing quality feedback. Research completed by Halley, Heiserman, and Eshleman (2013) emphasized that a student-centered approach, with student small group presentations, allow students to truly immerse themselves in both the teaching and the learning process (p. 8). Collaboration and sharing knowledge is the key component of an inclusive classroom that revolves around cooperative learning. “Quiet students are given the opportunity to voice their opinions in more intimate groups, vocal students are kept from overpowering the entire class, and every student is held accountable for firmly understanding and applying course material in meaningful discussions” (Halley, Heiserman, & Eshleman, 2013, p. 8)

Furthermore, teachers need to use proximity and play an active role ensuring that students have the background knowledge, resources, and tools to work together successfully. Tharp (2018) confirmed that “propinquity among students and teachers is created primarily by the number, diversification, and simultaneity of activities (all students engage in one activity, different students engage in different activities); the size and number of groups, teachers directly instruct (whole group, small group, pairs, individuals); and whether the teacher instructs all students in the classroom” (p. 93). The

cooperative learning environment needs to become a realm of collective activities that are unfolding in tandem. With each activity or learning task benefiting the core academic needs of the individuals within each group.

At the same time, it is important to incorporate diversity to keep the learning process moving forward and provide opportunities for students to see the world beyond the local community. Tharp (2018) explains the importance of balancing comfort of the known with introducing factors that challenge the way students think and see the world around them:

“Contextualizing classroom activity in the activity patterns of the community may empower students as it activates their repertoire and provides the comforts of familiarity. To allow these cultural forces to totally determine classroom activity settings may also limit learning, both academic and social. Therefore, there is a role for expanding students’ experiences beyond the familiar, for expanding their repertoires and their range of achievements, and therefore their opportunities in a diverse society” (Tharp, 2018, pp. 11).

Successful cooperative learning environments take time to establish. The classroom culture needs to revolve around activities that keep students busy cognitively while students embrace the importance of learning. It is essential that the teacher conveys high expectations for learning for all students and insists on hard work; students assume responsibility for high quality by initiating improvements, making revisions, adding detail, and/or assisting peers in their precise use of language (Danielson, 2013).

## **Small Group Learning**

Perez (2014) supported the concept of giving students roles and responsibilities to empower them to be leaders in the classroom community (p. 8). Students in middle school at Northeast Range (NER) displayed several aspects of attuning while working in groups of four with member roles that consist of facilitator, learning monitor, recorder and speaker. As shown in Figure 1 on page 44, the four member roles used at NER were taken from Learning Sciences International (LSI, 2018). LSI has established “Team Role Cards” that provide students with a guide to help them understand their role within the group as well as the responsibilities of each role (LSI, 2018, p. 3). Established roles and guidelines help students overcome lack of confidence and polish the skills to respond to each other effectively. Similar to LSI group roles, Stott (2018), used discussion roles to help guide students through the communication process, see Figure 2 on page 45. “Quieter students [can be helped] by providing them with scaffolds such as sentence stems, or by giving them a specific role, such as summarizer, that provides a clear route into discussion” (Stott, 2018). Students working in small groups with self-selected roles at NER used comparable phrasing and vocabulary; as well as, shared engagement in similar topics, and took turns speaking and listening. The key is to increase the number of low-stakes opportunities to speak, in a supportive environment, which may give students the confidence they need to find their voice (Stott, 2018).

The establishment of group roles and allowing students opportunities to try various parts will open up student creation of learning teams based on specific individual strengths in different roles. At the same time, students are provided with the opportunity to experiment with decisions and make mistakes in a safe environment. Miller (2015)

confirmed that “by establishing classroom norms routines that support safe environment, we can provide students with the scaffolding they need as they fail forward” (p. 5). The essential message Miller (2015) promoted is that by allowing and even promoting productive failure in the classroom, students build resiliency. Which in essence helps students understand that failure is an indication of what still needs to be learned not the end. In order for students to embrace the concept of “failing to move forward” relationships built around trust and equity need to be firmly established within student groups.

Establishing routines and norms that allow students to grow and learn together is essential; however, it is important for teachers to let go of mundane tasks and allow students to take risks. Zwiers (2008) described the same-old same-old routines that create insipid routines for communication tasks (p. 102). One example is the oral book report where the student summarizes the plot, the teacher asks a few probing questions, and other students ask surface level questions (Zwiers, 2008, p. 102). Learning through simple routines and tasks are not enough for all learners. Hence the importance of teachers creating a collaborative environment where students are required to step out of their comfort zone into a learning environment where they may be uncomfortable.

### **Developing Communication Skills**

It is important for educators to come to an understanding that whole group dialog has a place; however, continuous lecture and discussion activities alone do not provide authentic experiences for students to develop effective communication skills. Tharp (2018) indicated that “teachers have that dialogic experience, only a small number of students do; those are the confident, competent students who need it the least” (p. 95).

Many students who lack social and grade level communication skills may feel threatened in an environment that requires them to work with their peers. LSI (2017) recommended that students create a Team Talk Wheel to help work through situations when they feel nervous about participating within the group (p. 55). Team Talk Wheels are comparable to student created guidelines which help establish security for students, see Figure 3 on page 46 for a Team Talk Wheel example. Creating guidelines with students provides an opportunity to establish a positive culture for talk, while providing opportunities to dispel any negative, perhaps unspoken, misconceptions students may have about discussion (Stott, 2018).

One of the main reasons students struggle to communicate falls upon uncertainty and inability to manage anxiety. Hill and Miller (2013) confirmed that small groups can greatly reduce student anxiety, because small groups are supportive and interdependent allowing students to feel more comfortable (p. 56). Having set roles within groups with sentence starters, conversation guides, and sample questioning; provides students with options for contributing and alleviates uncertainty. The research shows that combining student created guidelines with conversation prompts creates a safer opportunity to participate in discussion while boosting confidence and learning more about their personal selves as well as their classmates. See LSI Figures 5 through 7 on pages 48-50 for examples.

Continued practice and opportunities to experiment with communication and various discussions is required for students to grow and polish their skills. As Northeast Range (NER, classroom observation fall 2018) students experimented and practiced working in their small groups of four, students were observed minimizing interruptions

and corrections while they adjusted their focus to listening and being careful not to breach established classroom discussion norms. Laal and Ghodsi (2012) recorded numerous benefits of cooperative learning that are social, psychological and academic in nature (p. 487). Their research highlighted social benefits that include social support systems for learners, building diverse understanding among students and learners; psychological benefits that include student-centered instruction, increasing student self-esteem, cooperation reducing anxiety, as well as positive attitudes towards teachers; and academic benefits that foster critical thinking skills, an active learning process, and increase in student problem solving techniques (Laal & Ghodsi, 2012, pp. 487-488).

### **Self-Monitoring and Conflict Resolution**

Not only will collaboration allow students to expand their critical thinking and problem solving skills, the collaborative learning process establishes a stage where students can continue to practice communicating, sharing thoughts and ideas, while working through differences, and learning from failure. The evolution of a safe and secure environment blossoms from a student-centered classroom built on cooperative learning and academic exploration.

Many educators and administrators envision a flexible classroom with cooperative learning as organized chaos that is loud and out of control. It is a misconception that teachers do not have a handle on classroom management and students are simply allowed to run amuck. It is true that a flexible classroom is a busy place where conversation and exploration has a place. At the same time, maximizing student relationships within the classroom through high expectations and standards moves students towards playing an active role in self-monitoring. In a flexible classroom that fosters healthy relationships

through cooperative learning, “students take an active role in monitoring their own behavior and/or that of other students against standards of conduct while the teacher monitoring of student behavior is subtle and preventive” (Danielson, 2013, p. 47). The key concept behind students monitoring their own learning and behavior is building up personal identity. When students believe in themselves and are willing to speak up and share their thoughts, the learning that takes place has personal meaning.

As students adapt and learn to manage their own behavior; they need to develop skills in the areas of conflict resolution, problem solving and compromising. It is extremely challenging for adolescents to grasp the concept of give and take in resolving disagreements if they do not have multiple opportunities in a safe environment to practice. Using questioning and verification prompts during small group activities and collaborative learning can also help students learn to skills necessary for conflict resolution while not compromising self-identity. It is important that teachers help students to see that “any positions, standpoints, or solutions should always be understood as subject to being revised, changed, deleted or replaced” (Guirdham, 2005, pg. 246). Risk taking combined with uncertainty and anxiety that is fostered in a safe and secure environment provides students opportunities to explore while maintaining their identity. If one’s own identity is secure, there is no need to threaten another’s sense of identity (Guirdham, 2005, pg. 246), ultimately increasing the success of the student-centered classroom and overall relationships among students working in collaborative scenarios.

“More than venue, more than furniture, more than actions, activity settings consist of people, and in the classroom, activity settings consist of various combinations of teachers and students. The nature of their joint activities

determines the qualities of peer relationships and teacher-student relationships, and these relationships have profound consequences for the excellence of learning or the lack of it” (Tharp, 2018, p. 10).

At the same time, all the tools, resources, evidence and data will not impact all students with the change that is being sought without students taking ownership in their educational journey. Educators need to allow students opportunities to succeed and fail in a safe learning environment. As students develop a deeper understanding of their strengths and weaknesses, and the potential benefit from working together, they will learn to trust in each other and themselves. It is the teacher’s responsibility to create a flexible classroom where students feel comfortable and secure enough to explore education and make mistakes. Miller (2015) confirmed in his book, *Freedom to Fail*, “When we fail in safe ways, we want to learn more. Our frustration in the face of failure can help us develop the grit we need to succeed” (p. 3).

Students need to develop a deeper understanding that vulnerability, imperfection and conflict are not weaknesses, but identifiable strengths that can be the base for growing as individuals and groups. Developing and understanding of our strengths and weaknesses allows us to share our strengths with each other, which in turn improves our weaknesses through shared knowledge and skills. Ultimately, creating a foundation to search for truth and evidence together; sharing experiences that enhance critical thinking and problem solving. After all, failure is an indication of what still needs to be learned, and resiliency and perseverance, which are honed through failure, are key life-long skills for students (Miller, 2015, p. 3).

### **Questioning and Understanding Depth of Knowledge**

Moving forward with the concept of guiding students towards ownership in the educational process is creating a flexible, inclusive classroom that meets the learning and social needs of all students. It is important to understand that all students need opportunities to have their voices heard. Baughman, Carlock, McGaugh, and Walkup confirmed that current literature shows that students crave academic challenges and the opportunity for their teacher and peers to hear their voices (2009, p. 6). Small group and cooperative learning provide students a platform to work together and practice communicating and taking risks; however, this alone is not sufficient. Advanced organizers (LSI, 2018, pp. 27-31) are a key tool in assisting students during the collaborative work and discussions no matter what their current skill level. For example, students fill out the information needed during instructional time and reference the organizer during discussion or group work (LSI, 2018, pp. 27). “The use of graphic organizer strategies can help students consolidate and elaborate their understanding of what’s been read; however these strategies are usually done best in collaborative teams using the principals of structured cooperative learning” (Perez, 2014, p. 71). Examples of LSI graphic organizers can be found in Figure 9 through 12 on pages 52-55.

LSI (2018 & 2017) verified that students need to employ strategies that involve higher Depth of Knowledge levels. Using questioning and discussion prompts provides students with the opportunity to practice and master skills required to collaborate in learning situations across content areas while experiencing a degree of autonomy.

Questioning allows students to facilitate not only their own learning, but the learning of group members. Discussion prompts that include question stems stimulate

conversation breaching all four Depth of Knowledge (DoK) levels are an essential part of establishing high functioning learning groups. The DoK Question Stems can help students facilitate conversation during small group discussions and collaborative projects. In addition, question stems, can help students ensure that they are reaching a variety of knowledge depths and matching their depth of knowledge to the learning activity they are completing. Samples of the DoK levels and Question Stems can be found in Tables 2 through 6 on pages 38-42.

The four levels starting with the first are Recall/Reproduction, Skill/Concept, Strategic Thinking and Extended Thinking, according the Wisconsin Center for Education Products and Services (WCEPS, 2017). Aungst (2014) summarized the four levels of Webb's Depth of Knowledge the best. Tasks at the level of Recall and Reproduction, Level 1, require recall of facts or rote application of simple procedures; keeping in mind, the task does not require any cognitive effort beyond remembering the right response or formula (Aungst, 2014). Examples of typical Level I tasks are copying, computing, defining, and recognizing. At level 2, Skills and Concepts, a student must make some decisions about his or her approach, which includes tasks with more than one mental step such as comparing, organizing, summarizing, predicting, and estimating (Aungst, 2014). A task with multiple valid responses where students must justify their choices would be Level 3, Strategic Thinking. Aungst (2014) described at this level of complexity, students must use planning and evidence, and thinking is more abstract. Examples include solving non-routine problems, designing an experiment, or analyzing the characteristics of a genre. Level 4 tasks require the most complex cognitive effort; this is when students synthesize information from multiple sources, often over an

extended period of time, or transfer knowledge from one domain to solve problems in another (Aungst 2014). Designing a survey and interpreting the results, analyzing multiple texts by to extract themes, or writing an original myth in an ancient style would all be examples of Level 4 (Aungst 2014).

As students develop a deeper understanding of DoK, they are able to identify their own strengths and weaknesses while actively engaging in building knowledge across the DoK levels. Aungst (2014) verified that educators apply Webb's DoK to help them design better instruction. Similarly, DoK provides a useful way to plan lessons and develop learning activities that are more interesting, challenging, and creative. According to research compiled by Baughamn, Carlock, McGaugh, and Walkup, results will help students, no matter their grade level, develop the higher level cognitive skills that educators and the business community agree will fuel competitive success in the global, highly-connected information environment of the twenty-first century (2017, p. 2).

### **Summary Statement**

Successful academic collaboration is derived from practice and access to resources that help students build and fine tune communication skills. It is essential that teachers, lay the foundation for the development of a learning environment that revolves around individual student needs. Meeting student needs with differentiation alone is not a practical option for middle school teachers that are instructing multiple classes at a variety of grade levels each day. However, when combined with cooperative learning scenarios in a flexible classroom, differentiation becomes a norm that is managed by the students and facilitated by the teacher. It is the responsibility of the teacher to provide core instruction, facilitate direct instruction, and guide students through collaborative

discussion and enriched learning activities. On the other hand, it is the students' responsibility to take ownership in the education process and contribute the overall collaborative environment.

As students build self-confidence, learning to trust themselves and their peers, they develop a deeper understanding of their own strengths and weaknesses. This self-awareness, combined with collaborative resources, provides students the opportunity to share knowledge with their peers while gaining needed knowledge in return. The students, thus, take on the responsibility of managing their own educational success while helping each other navigate the academic highway. The ultimate goal needs to remain focused on the flexible, inclusive classroom that is student-centered and provides practical resources for teachers and students to use during a variety of collaborative learning scenarios. It is essential that students have access to tools and resources to help them fine tune communication, problem solving and collaboration skill sets, until the skills are a natural part of their individual communication style and automatic behavior set.

### **Chapter 3: Method**

As the academic world shifts to student-centered learning it is crucial that students have the resources and tools to effectively communicate with each other. The literature review verifies the need for students to have access to tools and resources to help them fine tune communication, problem solving and collaboration skill sets. Likewise, helping students identify their strengths and weaknesses while building an understanding of questioning and depth of knowledge is key to building strong successful lifelong learners. Teacher-centered classrooms of the past can no longer provide the knowledge and essential skills sets that are required for the ever changing workforce of today and tomorrow.

#### **Connecting the Review of the Literature to the Problem**

Flexible, inclusive classrooms and cooperative learning environments supports the educational success of students from kindergarten through post-secondary, collegiate classrooms. This literature review and capstone project focuses on the middle school Language Arts classroom where necessary communication skills required for students to work effectively in collaborative learning scenarios are being modeled and taught.

The created resources will help all students foster and develop communication skills required for success - not only in school, but in everyday life. Support for collaborative learning in classrooms is recognized in Laal and Ghodsi's (2012) report. Their data, taken from Johnsons' survey of educational research, demonstrates cooperation, in comparison with competitive and individualistic efforts, result in (Laal & Ghodsi, 2012, p. 487):

- Higher achievement and greater productivity;

- More caring, supportive, and committed relationships, and;
- Greater psychological health, social competence and self-esteem.

Furthermore, providing students with group roles and resource materials (which includes discussion and higher level questioning prompts, as well as conflict resolution guides), help students manage their personal anxiety and uneasiness. Similarly, the literature research shows that a flexible, inclusive classroom fosters a safe and secure culture that allows students to maintain self-identity while taking risks - ultimately maximizing their learning capabilities.

The stated core assumption is that in order for the student resources to be effective, the flexible classroom must foster student collaboration that revolves around respect and highlights individual group member's abilities and contributions. "There is a sharing of authority and acceptance of responsibility among group members for the group's actions. The underlying premise of collaborative learning is based upon consensus building through cooperation by group members, in contrast to competition in which individuals best other group members" (Laal & Ghodsi, 2012, p. 486).

The resource created for the capstone project will act as a bridge connecting the flexible, inclusive classroom and differentiated instruction to collaborative learning. Evidence from the literature review supports that adding student communication resources to small group and collaborative learning will not only help teachers foster student ownership in education, the resources will increase student self-behavior monitoring as well as overall academic achievement.

**Methodology for Completing the Applied Capstone Project**

The resources created for the applied capstone project will include steps for building and establishing group roles, student created guideline material, discussion prompts, questioning guides based on depth of knowledge levels, thoughtful listening criteria, and a conflict resolution guide. Consultation with teachers currently using collaborative learning and research based teaching materials, will be used as a guide for creating the resources to be used by teachers and students. Draft samples of the resources will be shared with the consultation teachers and feedback will be used to modify, revise and make changes.

**Evaluation of the Quality of the Applied Capstone Project**

In addition, the resources will be shared with high school students to use in a variety collaborative learning scenarios. The feedback provided by the students will be used to adjust the material to acquire a user friendly format. The final resource materials will then be shared with the consulting teachers one last time. Feedback will be given during a round table discuss to assess teacher collaboration modeling of the resources. Any last minute changes or adjustments will be made prior to the presentation of the applied capstone project.

**Presentation of the Applied Capstone Project**

The final presentation of the applied capstone project will be presented to the Department of Professional Education at Bemidji State University as part of ED 6850 course, as set forth by the University to meet the Applied Masters of Special Education requirements. In addition, the materials will be presented to St. Louis County Schools, ISD2142, curriculum director, Northeast Range principal, PLC facilitator, and a middle

school Language Arts teacher. The purpose of sharing the literature review and capstone project is to provide a resource that can be made available to teachers as the district moves towards a student-centered learning model. The resources fit in with the current district plans by combining methods already being implemented, LSI (standards based instruction), MTSS (tier interventions), Charlotte Danielson Model, and Depth of Knowledge aligned to essential standards.

### **Summary Statement**

The literature review established the foundation and evidence required to justify the creation of resources to help students develop communication and collaboration skills. Even though the resources are created for a middle school Languages Arts flexible classroom, they are intended to be used across content areas. It is important to understand that the creation of the capstone project materials requires feedback from teachers and students in order to create a resource that meets the needs of the student and teacher alike. Similarly, the resources need to be user friendly while fostering critical thinking at a variety of learning levels and depths of knowledge.

#### **Chapter 4: Applied Capstone Project**

The materials created for the Applied Capstone Project, the Literature Review, and the supporting documentation can be found online as part of my Language Arts webpages through the Northeast Range School. It is important, for my personal professional growth and development, to share materials with other professionals, parents/guardians, and students. Visit [www.northeastrangeschool.net/page/3561](http://www.northeastrangeschool.net/page/3561) to view all of the documents for this graduate project. In addition, samples of the capstone materials are included within this document, see Figures 14 through 26, pages 56-68.

## **Chapter 5: Conclusion**

Creating a set of resources for students to refer to and use during collaborative activities, discussions, and small group projects turned out to be an essential part of successful collaboration. During the process of creating the capstone materials, consulting with teachers and students was a critical part of the overall process. The feedback that was provided initiated the changes and revisions needed to develop materials that were user friendly while stimulating student interaction. The final resources include group role cards, discussion wheels with prompts, questioning guides based on depth of knowledge levels, thoughtful listening criteria, and a conflict resolution guide, see Figures 14 through 26 on pages 56-68.

The first draft of the hands on materials were designed with basic color schemes. My initial thoughts were to keep the material simple and avoid busy designs. After meeting with several groups of students, 7-12 grade, it quickly became apparent that a theme or design was needed to help students connect with the materials. According to the students, it was crucial that the materials were sophisticated and academic, not childish. Ultimately, a theme of bricks and graffiti style fonts evolved from conversations with students. It was suggested that each group should have a set of role cards, so everyone knows what part they play and the expectations. Students thought it might be fun to randomly select cards to step out of their comfort zone and try new group roles. Finally, several sets of group role cards were created with different colored bricks. In addition to group role cards, color coded table top posters were made to display roles and provide a visual reminder to help students maintain focus on their task.

The color coordination and graffiti theme went into all of the communication materials that can be available to each student or displayed in the center of each table. An excellent suggestion came from a student who was observing me experimenting with a two-sided table top display – one side for talking and the other side for listening. The display can be easily rotated to adjust for discussion and debate. As I worked through the design process, sharing my thoughts and ideas with students became a critical piece of the revision process. This concept forced my adult brain to maintain focus on creating student centered materials that assist with using the communication skills required for collaborative work.

While observing journalism students in grades 11-12, I saw their ability to develop norms and select roles prior to group work without adult guidance. See figure 8 on page 51 for student sample of group norms. The students indicated that it is extremely important to hold each other accountable and establish clearly defined roles, so everyone understands the expectations. This helped me develop a deeper understanding of how students grow as learners together and need resources in earlier grades to build effective communication skills. It is equally important to encourage students to establish group norms and set expectations before to starting to work together.

Prior to finalizing the materials for the Capstone Project, I met with several middle school general education teachers and a special education teacher. After sharing a summary of the literature review, the purpose for the project material, and demonstrating how the materials work for students with a variety of abilities; the teachers were very supportive. The feedback I received from the educators allowed me to return to the

revision process and make minor adjustments that met the needs of teachers from an individual classroom standpoint.

One suggestion, that inspired a future expansion project, came from the teachers' interest in a digital copy that could be edited to meet the needs of content area courses. The main idea behind this request was using a template to create question materials for specific units of study. Teachers could intertwine content area questions into the premade material designs and maximize student learning and productivity with a set routine and expectations. Adding content specific questions and tasks, provide ongoing practice and opportunities to experiment with communication and various discussions that are required for students to grow and polish their skills.

The journey I have taken during the research and development of my graduate project has provided me with multiple opportunities to connect new knowledge with my graduate studies and grow as an educator. My expanding professional repertoire has increased my ability to connect directly with the needs of individual students. As I move forward, I plan to use the knowledge I have gained and the Capstone Materials to meet the needs of all students during collaborative learning ventures. It is essential that students have access to tools and resources to help them fine tune communication, problem solving and collaboration skill sets, until the skills are a natural part of their individual communication style and automatic behavior set.

[insert pages 37-67 table, figures and capstone materials]

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