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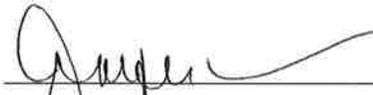
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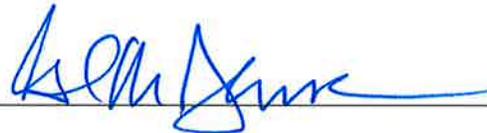
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INVESTIGATING “RETURN TO LEARN” PRACTICES FOR CONCUSSED
STUDENTS: ONE JESUIT HIGH SCHOOL’S APPROACH

By
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A DISSERTATION

Submitted to the faculty of the Graduate School of the Creighton University in Partial
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Abstract

Student concussions have emerged as a national health and safety issue across the educational spectrum. Recent legislation in many states has fostered a more structured school response system in determining when a student-athlete is eligible to return to athletic competition after suffering a concussion. While such legislation has prompted immediate responses from athletic governing bodies, research and action promoting a “return to learn” policy within school structures has been limited prompting educational leaders to pose the question of when is a concussed student prepared and able to return to the academic environment? The purpose of this dissertation in practice was to explore and understand teachers’ perceptions of the implementation of a concussion management system and its impact on return to learn practices for teachers at a one Catholic secondary school. The study produced three key findings: Institutional Awareness: Exploring the Unknown; Institutional Action: Teachers’ Perceptions Regarding Implementation of Return to Learn and Return to Play Policies; and The Necessity for Institutional Reflection: Teachers’ Perceptions About the Need for Ongoing Evaluation. Implications for leadership include a broadening or development of a Return to Learn protocol that supports students with learning differences.

Dedication

It is with my deepest love that I dedicate this work to my amazing wife Megan and my beautiful and talented daughters Lucy, Clare, Anna, and Charlotte. Without your encouragement and support, I could not have completed this journey. To my girls, I hope that I have set an example for you to be life-long learners with a thirst for knowledge. Perhaps now I will no longer be dragging my computer and many books to your practices, swim meets, and games. Thank you for loving me through this process.

I also dedicate this dissertation work to my parents who taught me the value of a great education and paved the way for me to succeed. Mom, thank you for your love and support while I achieved this goal. Dad, I know you are looking down with a smile towards my work, particularly because we both have achieved doctoral degrees from Creighton. Go Jays.

Finally, I dedicate this work to my many friends and colleagues who have cheered me on throughout this process. I am blessed to be surrounded by so many intelligent people who inspire me to be better each day. I greatly appreciate the consistent prayers from all of you, particularly my good friend Fr. Stephen Barber, S.J.

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I would like to acknowledge and thank Central Catholic High School for allowing me to conduct research and implement changes to better serve their students. I was blessed to conduct research at an institution that strives to be the best. Special thanks goes to my friend Mr. Tim Moscicki, ATC, who allowed me to invade his world of sports medicine and to interrogate the school's practices.

Finally, I would like to thank the 23 teachers who gave their time and shared their experiences with me. Their excitement and willingness to be a part of this study demonstrated a sincere effort to serve their students.

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CHAPTER ONE: INTRODUCTION

Background of the Problem

The health and safety of all students is of paramount concern for those in positions of educational leadership. At secondary schools, the responsibility of balancing the health and well-being of students engaged in the day-to-day activities of student life is that of the principals. In recent years, the issue of student concussions emerged as a critical junction between what is legally required of schools in caring for these students and what is ethically expected of school leaders responding to student concussion situations. Unlike traditional injuries such as a broken leg or arm, concussions are not readily outwardly visible. Symptoms include, but are not limited to forgetting very fast or demonstrating short-term memory problems, weak and slow response to questions, and low level of consciousness (McAvoy, 2011).

The issue of concussions plays a significant role in many areas of athletics. The largest athletic industry, football, has come under considerable scrutiny with many lawsuits filed against institutions such as the National Football League (NFL) and the National Collegiate Athletic Association (NCAA), among others (Solomon, 2014). In 2014, the NFL settled a lawsuit with over 5,000 players for \$765 million (Almasy & Martin, 2015). The lawsuit alleged that players were not warned about the dangers of concussions and were not properly treated throughout their playing careers. The settlement included a promise from the NFL to pay up to \$5 million dollars to players suffering from specific neurological disorders. There was also an increase in the number of retiring competitors whose decisions to no longer pursue the sport demonstrate the severity of concussion issues.

In March of 2015, 24-year-old Chris Borland of the San Francisco 49ers announced his retirement from the NFL after only one year of play. Borland was extremely successful in his rookie year and stood to make millions of dollars over his playing career. In reference to multiple concussions he suffered, Borland stated, “From what I’ve researched and what I’ve experienced, I don’t think it’s worth the risk” (Belson, 2015b, para. 9). Other NFL players followed suit and announced their early retirement, including Tennessee quarterback Jake Locker, 26, Pittsburgh linebacker Jason Worlds, 27, Oakland running back Maurice Jones-Drew, 29, 49ers linebacker Patrick Willis, 30, and Miami cornerback Cortland Finnegan, 31 (Roth, 2015).

At the collegiate level, the NCAA settled a class-action lawsuit filed by dozens of former collegiate players (Keilman & Manchir, 2014). The lawsuit accused the NCAA of putting the players’ health at risk by leaving concussion care policies and protocols to be determined by the individual institutions. The settlement resulted in a \$70 million commitment from the NCAA to establish concussion testing and diagnosis of current and former student-athletes. Further, the NCAA committed \$5 million towards concussion-related research. Because the list of concussions is vast and wide across professional and collegiate sports, especially among football, concussions are receiving much greater media attention (Wasserman, Bazarian, Mapstone, Block, & van Wijngaarden, 2016).

Lawsuits regarding concussion care have been filed on behalf of the youngest players of tackle football (Belson, 2015a). In February of 2015, the family of Joseph Chernach sued the youth football league, Pop Warner, alleging that the league failed to warn players and parents about the effects of head trauma. Chernach committed suicide at age 25 after suffering from chronic traumatic encephalopathy, a degenerative brain

disease, for some years. The suit also alleged that the youth league did not train coaches properly, failed to use the safest equipment available, did not teach players proper tackling techniques, and did not follow concussion protocols established by medical professionals in 1997 (Belson, 2015a).

The number of teenagers diagnosed with concussions increased by 200% over the past decade (Head Case, 2015). A compilation of statistics carried out by the Southwest Athletic Trainers Association (n.d.) highlights the magnitude of concussion-related injuries. It illustrates the following results:

- About 8,000 children are treated in emergency rooms each day for sports-related injuries.
- Female high school soccer athletes suffer almost 40% more concussions than males.
- Women basketball players sustain 240% more concussions than their male counterparts.
- Emergency department visits for concussions sustained during organized team sports activities doubled among 8 to 13-year-olds between 1997 and 2007 (Lindley, 2014).

Since many of these injuries occur during athletic participation, schools developed “concussion management programs” to determine when an athlete is ready to resume athletic competition. While much is known about concussions during athletic participation in high school settings, less is known about the implications of the students’ return to the classroom and the factors that contribute to school leaders’ decision for the student to return to learn (Heyer, Weber, Rose, Perkins, & Schmittauer, 2015). The

prevalence of concussion injuries, coupled with recent legislation, forced school leaders to consider developing protocols or policies which will help protect students as they reenter the classroom after a head injury (Tarm, 2014).

It is not uncommon for many students who suffered a concussion to return to school in a week with little or no guidance on the best ways to recover. Each concussion is unique in nature but always carries cognitive demands (Miyashita et al., 2014). Careful observation, a team approach, and management are essential in achieving proper outcomes that can serve the students in their safe recovery in both learning and their athletic activities. In many situations, components associated with returning to play should not be started, especially if the student is going having difficulties with school work. The procedure should be initiated after the student completes a full day at school to ensure the student can perform regular coursework without exhibiting symptoms (Ballantyne, Clegg, Sankar, & Dean, 2012).

Current Guidelines, Laws, and Transitioning Practices

All 50 states and the District of Columbia adopted laws protecting young athletes from returning to play too soon. Few studies conceptualized the impact of athletic and non-athletic concussions on the schooling experience beyond offering few data on the systematic approaches aimed at supporting students with concussions.

Emerging litigation sought to address the need for a more comprehensive review of concussions in students engaging in athletic activities (Tarm, 2014). As previously mentioned, some precedent-setting cases and legislation in California and throughout the United States sought to address this within secondary school settings. Of particular note is a suit filed by Daniel Bukal, a star quarterback at Notre Dame College Prep in Niles,

Illinois, until 2003. At the time of this study, Bukal suffered from migraine headaches and memory loss, and he attributed these ailments to his high school football experience. This litigation filed against the Illinois High School Association alleged that the association did not have concussion protocols in place, putting Bukal and other high school players at risk and that those rules remain deficient. The claim called on the Bloomington-based association to tighten its rules regarding head injuries at the 800 high schools under its governance. The suit sought reform and did not pursue specific monetary damages (Tarm, 2014).

Many guiding principles for concussion management and return to play (RTP) were formulated. Beginning in 2001, concussion investigations and research by clinical experts led to the establishment of conventions attended by stakeholders at the International Symposium on Concussion in Sport (commonly referred to as CISG, an initialism for Concussion in Sports Group). Attendees at these conventions sought to establish agreed-upon and acceptable guidelines for the evaluation, assessment, RTP, and treatment for sports-connected concussions in athletes regardless of their age. Depending on the site of the convention where the guiding principles were established, the literature refers to them as the Zurich, Prague, or Vienna guidelines.

Between 2011 and 2012, New Jersey established policies requiring leaders at schools with interscholastic game projects to develop composed approaches concerning counteractive actions and treatments for sport-related concussions. Since the sanctioning of this enactment, there has been no examination of the measures taken by leaders to set up policies concerning concussions (Wasserman et al., 2016). Results from the study uncovered that school leaders expanded their insight on circumstances that may lead to

concussions (Almasy and Martin, 2015). Furthermore, due to a void in leadership, numerous schools were not in compliance with the New Jersey Concussion Law two years after its implementation. Teachers reported various obstructions in actualizing the law, such as budgetary impediments, staff constraints, and absence of consistency among the 603 schools local (Faure, Moffit, & Schiess, 2015).

In 2013, the Georgia State Legislature approved the Return to Play Act, setting up a statewide concussion policy. The law calls for all schools with youth sports activities to formulate RTP policies with three key criteria: (1) exclusion from play for athletes who show symptoms related to concussions, (2) provision of learning material to the parents or guardians of the athlete on concussion and head injury risks before the commencement of every sport’s season, and (3) allowing athletes who recovered from concussions to return to play only after receiving medical clearance from a qualified physician, nurse, or physician assistant trained on how to assess and treat concussions (Slobounov & Sebastianelli, 2014).

In 2015, a lawsuit was filed against the Illinois High School Association, the governing body for policy and compliance in Illinois high school sports. The suit called for the association to implement policies requiring schools to have medical professionals with concussion expertise present at all football games and on call for all football practices. Additionally, it sought new guidelines for the brain screening of athletes as well as a program to educate teachers about concussions (Keilman, 2015). The association argued that the already-implemented actions for countering injuries during sporting were adequate for the students, and, hence, an additional push would culminate in non-feasible expenses. The judge in the case agreed with the association and cited that

the organization had already implemented its Play Smart/Play Hard program that highlights athlete safety. Interestingly, there were many parents who did not want their children to have to follow a more developed protocol at the expense of playing time (Mullarkey, 2016). The lawsuit was sparked by the experience of a student who sustained a severe concussion while playing high school football. The public nature of this case helped to create greater awareness regarding the dangers of concussions (Keilman & Rhodes, 2015).

The ramifications of learners returning to the classroom and effects on their academic progress are not well defined in secondary school settings. However, much is debated about concussions in the area of athletics and RTP within the same institutions. The predominance of concussion ailments, combined with the late enactment of RTP, constrained school leaders in considering the advancement of conventions or arrangements to secure their students as they return to the classroom after suffering from head injuries possibly associated with concussions (Tarm, 2014).

A study by Corden, Halstead, and Walter (2013) suggested that, in addition to community education, remove from play, and RTP, schools should consider adding “return to cognitive activity” as the fourth element of a concussion protocol. This added element acknowledges the metabolic mismatch causing concussion symptoms and encourages limited cognitive effort, including no computer or video gaming or cell phone use, relaxation, and increased sleep until symptoms resolve (Rigby, Vela, & Housman, 2013). Further, “return to cognitive activity” intersects with return to learn (RTL) as both elements call for time off from school with reduced or no homework. These approaches

require greater communication among school leaders, the attending physician, the athletic trainer or school nurse, and parents to optimize the return of the student to academic life.

The topic of RTL is largely ignored in concussion protocol research, and, as a result, many concussions go unnoticed, with students returning to the classroom before they are ready to learn (Carson et al., 2014, p. 314). According to Carson et al., “even when appropriate guidelines are followed, and management plans are given by physicians, many students return to learning or sport too soon” (p. 314). Further, Carson et al. suggested a need for further research to determine the best management plan for the concussed students’ return to the classroom (p. 314). An efficient protocol must consider the implications for a student returning to the classroom as well as an efficient communication system for school leaders to inform teachers of prognosis and expectations.

Background of the Study

RTL refers to a student’s re-entry into the classroom after sustaining a concussion. Much consideration has been given to concussions sustained in athletics. The primary focus has been on diagnosing a concussion quickly and identifying the swiftest manner in which to return a student-athlete safely to the field of play. However, little attention has been given to a concussed student’s academic progress of (Halstead et al., 2013). Post-concussion symptoms typically interfere with a student’s ability to complete assignments, to function in a classroom setting, and to interact with teachers and fellow students (McGrath, 2010). Concussed students can suffer from severe headaches, impaired memory, and impaired attention spans. The school environment, with expectations of prolonged concentration coupled with noise and distractions, can

exacerbate concussive symptoms and create an unmanageable learning environment (Grady, 2010).

Limited research has been conducted in the area of RTL, creating a challenge for school leaders in identifying the optimal way of proceeding (Grady, 2010). A student’s return to the classroom is an individualized process requiring both cognitive and physical rest (Miyashita et al., 2014). Some students can return to learning quickly and may need the structure of a school environment to stimulate cognitive recovery (Master, Gioia, Leddy, & Grady, 2012). Conversely, other concussed students might need “a controlled ramp-up in cognitive activity,” so as not to exacerbate their symptoms. Given the subjective nature of concussions, McGrath (2010) recommended that schools develop a comprehensive concussion protocol designed to deal with both athletic and educational concerns that ensures proper support for the concussed student-athlete.

Teachers and the RTL Process

Given their consistent interaction with students in the classroom, teachers play an important role in a concussion care protocol. First, teachers interact students on a regular basis and can help in the detection of concussions if they observe a student acting in an irregular manner. They can share their concerns with a school nurse or athletic trainer who can take steps to help analyze the student’s situation. Second, by making short-term adjustments to a concussed student’s workload and schedule, teachers can help that student return to academic normalcy in a manner that fosters trust.

Concussed students take consolation in knowing that those around them understand their plight and are educated on what they are feeling. Concussed students need to be reassured by their teachers that they will not be penalized for late work or

missed assignments. The student needs to hear a constant and consistent message of support from all members of his or her concussion support team, which includes teachers. This can sometimes be difficult for teachers, as past experiences may cause them to doubt the significance of a non-visible injury. Skepticism can arise when a teacher suspects that a student might be faking the injury in order to avoid schoolwork. Additionally, concussions can sometimes take a long time to heal, which can cause teachers to become impatient and frustrated (Nationwide Children’s Hospital, 2012).

Purpose of the Study

The purpose of this case study was to understand teachers’ perceptions of the implementation of a concussion management system and its impact on RTL practices for teachers at a Catholic secondary school.

Findings from the study provided an evidence-based plan for addressing the problem of concussions and factors necessary in preparing proper RTL and RTP protocols. The actions are intended to be implemented by student leaders to assist students through proper RTL and RTP protocols. This dissertation in practice also aimed to use existing literature and evidence-based investigations to detail a solid component for countering concussions and proper methods of RTP and RTL.

Research Questions

The following questions guided the researcher in this study:

1. Where does RTL fit within a concussion care protocol?
2. How can a concussion model be properly integrated in order to ensure effective implementation of RTL?

Aim of the Study

The aim of this case study was to provide teachers’ perceptions to school leadership about an existing concussion care protocol implemented at the school site.

Application of the Study

Concussion care practices for experienced student-competitors may not suffice for less-qualified and younger ones because age levels cause contrasts in the degree of danger that the players may be exposed to. This study focused on the secondary school level that has not been fully examined by earlier researchers (The American Academy of Neurology, 2013). Therefore, the study provides a comprehensive outlook on the issue of concussions and suggests best management practices schools can enact. The adverse damage that concussions cause can be seen from the perspective of student health as well as that of its implication on learning (Bubka & Coderre, 2016).

Additionally, the NCAA (2013) allocated 30 million dollars coordinated at expanding information and knowledge on concussions and administrative capacities to enhance student well-being. This was guided by engaging the learners’ enjoyment of the game and lowering the occurrences of concussions. The level at which students agreed with the administration on such efforts on concussions implies that they would be interested in the setting of the best practices and, henceforth, will try to unravel bits of knowledge to enhance their understanding of concussions.

Significance of the Dissertation in Practice

Educational leadership is guided by an “ethic of care” (Starratt, 2012, p. 38). As school administrators are chiefly held accountable for their decision-making, educational leaders need to make informed decisions centered on students’ best interests (Stefkovich

& Begley, 2007, p. 210). Concussion management is particularly relevant given the frequency of occurrence (Hotz et al., 2014, p. 3). School leaders are called to respond to this phenomenon in the same manner as would be applied to students with special needs (Frick, Faircloth, & Little, 2012). Many educators remain unaware of concussions' implications for student learning (McAvoy, 2012). Therefore, this study sought to provide educational practitioners and those in leadership positions with a forum for professional development.

Using existing concussion management protocol of RTL and RTP, this study considered the factors necessary in allowing re-entry of concussed students into the educational space. Further, this study identified elements of RTL considered crucial by Catholic secondary school leaders facing the development of these programs throughout the United States. The significance of this study is bound by the need for further education and professional development on the topic. In this manner, the study will help improve practice in the area of concussion management by utilizing current best practices and data to develop a comprehensive protocol that focuses on all aspects of the student experience. This approach is of particular relevance to Jesuit education, which holds the ideal of educating the *whole person*. The researcher identified a gap in relationship to concussion care management in Jesuit schools and school leadership.

Method Overview

This study was qualitative in nature and utilized personal interviews for data collection. The purpose of in-depth interviewing was to explore and understand the lived experiences of other people and the meaning they make of that experience (Seidman, 2006). In this study, secondary Catholic school teachers were the subjects of the

interviews. Open-ended interviewing assumed that meanings, interpretations, or understandings cannot be standardized (Denzin, 1989). The process of interviewing, participating, and listening was an “attempt to live his or her way into the lives of those that were being investigated” (Denzin, 1989, p. 42). Therefore, interviews were the main method of data collection.

Purposeful sampling was utilized since the participants were each able to address the research question. All participant interviews were conducted in person, digitally recorded, and transcribed via Rev.com. The interviews were approximately 40 to 60 minutes in length. Researcher notes were also taken during the interview to supplement any discrepancies or clarifications in the audio. Each participant was briefed on the purpose of the study and reminded that his or her consent was given voluntarily, that the information would remain confidential, and that he or she was free to stop the interview at any time. Instead of a signed consent form, the participant provided verbal assent to participate in the study. The participant received a copy of the consent form via e-mail. The researcher maintained the consent form, placing the pseudonym used for the study, via email. The researcher maintained all recordings and documents in a locked cabinet accessible only to the researcher.

Ethics and Ethical Issues

According to and Motaki and Burke (2011, p. 3), consideration of ethical issues in research is critical. This case study observed requirements and guidelines that ensure upholding ethics in research development. The researcher sought the participants’ verbal consent through an introduction at the start of interview. The researcher explained the nature and the purpose of the questions and signaled the purpose of the data being

collected (Moreau, Langdon, & Buckley, 2014). Furthermore, the explanation helped promote confidentiality of the respondents’ information to prevent victimization. Verbal consent also gave the feeling of mutual understanding between the participants and the researcher, which allowed the smooth exchange of information (Melgoza, Mennel, & Gyeszly, 2002, p. 34).

For the matters of confidentiality and trust, the participants were not required to provide any personal information. They were issued numbers to help during analysis of the information they provided. In essence, when research participants are sure of information confidentiality and anonymity, they tend to be truthful in the data provision exercises. When they are uncertain of the state of privacy and anonymity, they tend to hold back much valuable information that would be very useful in the research.

Finally, the information was stored in a locked cabinet to ensure that information correspondents shared remained only in the hands of the researcher. This security measure ensured the data collected were not tampered with.

Justification for Methodology

Although much has been explored in the area of concussions and their implications on concussed students’ health and well-being, a case study approach was useful because it demonstrated the examination of one concussion management system and the ways the system worked to address student learning (post-concussion).

Register-Mihalik, Guskiewicz, McLeod, Linnan, Mueller, and Marshall (2013) as well as Moreau, Langdon, and Buckley (2014) employed a qualitative approach. These scholars sought to unravel common themes among students who experienced concussions as well as how a deficiency in diagnosis affected them. Given their contribution to how

institutions can decrease concussion prevalence, this dissertation in practice study aimed to formulate a plan for managing RTL processes that can be deployed in other institutions. The use of interviews for this study allowed for consistency among the background studies linking to this study.

McCrea, Prichep, Powell, Chabot, and Barr (2010) employed a quantitative approach in assessing the minor repercussions as well as the recovery implications of concussions and made strong inferences. In addition, Sloubonouv and Sebastianelli (2014) also took a quantitative approach to research and reached strong conclusions about the behavior of students who have undergone concussions. The existence of several quantitative methods calls for additional qualitative approaches and, hence, the decision to embrace in-depth interviews in this concussion study.

Data Analysis Plan

The personal interviews conducted in this study were transcribed verbatim by a paid transcription service. The researcher also listened to each interview and read the transcript thoroughly to verify accuracy. The researcher sent the final transcripts of each interview to the participant to member-check or verify the its accuracy (Creswell, 2014). Participants had the opportunity to clarify or edit information in the transcript as necessary. The data garnered from the interviews was coded and input into a database structured in relationship to the aims of the study. Creswell (2014) suggested that, to prepare data for analysis, one would need to categorize and “arrange the data into different types depending on the sources of information (p. 197). From the critical statements emerged the exemplars used to support the themes and illustrate the findings and interpretations of each section.

Sources of Data

The source of data was a research-designed interview protocol with 13 questions related to the implementation of a concussion care protocol including RTL and the reintegration of concussed students into the classroom (see Appendix B). The purpose of in-depth interviewing was to explore and understand the lived experiences of other people and the meaning they made of that experience (Seidman, 2006). In this context, the purpose of the interviews was to explore RTL protocols and understand their impact on the classroom teacher. Open-ended interviewing assumed that meanings, interpretations, or understandings cannot be standardized (Denzin, 1989). The process of interviewing, participating, and listening is an “attempt to live his or her way into the lives of those being investigated” (Denzin, 1989, p. 42). Therefore, interviews were the primary method of data collection.

The interview protocol was piloted in the spring of 2015. Two participants were interviewed. A revised protocol was used in the summer of 2015 with the researcher including feedback from participants coupled with peer reviews of the protocol.

The selected population consisted of 23 participants from a sample of 50 teachers who had taught students who experienced a concussion while enrolled in the teacher’s classes. Purposeful sampling was used because the individuals were capable of informing an understanding of the research problem due to their shared experience of implementing aspects of a concussion management protocol or system at their schools. The researcher utilized member-checking to ensure the accuracy of the transcripts. Theme analysis and major findings were shared with each participant and feedback was solicited as it pertained to accuracy and veracity (Creswell, 2014, pp. 201-202).

Key Terms

Academic adjustment: A short-term adjustment to a student’s academic schedule in the first one to two weeks following a concussion. In this scenario, a full recovery is expected, and the student will not require any significant curriculum or testing alterations (NCAA, 2015).

Academic accommodation: Necessary when a student experiences persistent symptoms for more than two weeks following a concussion. Due to a lack of recovery, the student may require a change in the course schedule and special arrangements may be necessary for testing, research papers, and projects. No fixed timeline for academic accommodations exists, however. This applies to student-athletes who have more elongated concussion symptoms, or who may be suffering from post-concussion syndrome (NCAA, 2015).

Academic modification: Enacted when a student experiences prolonged cognitive difficulties requiring a more specialized educational plan or an individualized education plan (IEP). An IEP is a formal educational plan for an individual and is made available under the Individuals with Disabilities Education Act. IEPs are more intentional than a 504 plan, which refers to Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. A 504 plan covers students who do not require an IEP but who need academic modification because of a documented medical condition (NCAA, 2015).

Cognitive: The process of having thought, judgment, or knowledge (NCAA, 2015).

Concussion: A traumatic injury to soft tissue, usually the brain, resulting from varying degrees of impact or shaking. A concussion can cause immediate but temporary

impairment of brain functions, including processing, vision, equilibrium, and consciousness. A person who has suffered a concussion is more susceptible to recurrence than a person who has not. Additionally, a person that has sustained several concussions can more easily be concussed and can require more time to heal (NCAA, 2015).

Diagnosis: The act of deciding the cause of a disease; the identification of an illness or problem (NCAA, 2015).

Head injury: Damage to any of the structures of the head as a result of the traumatic impact. Head injuries are most often thought of as an injury to the brain; however, other head injuries may include damage to facial bones, muscles, blood vessels, skin, and other organs of the head. There is a distinction that exists between a head injury and a brain injury (NCAA, 2015).

Neurologist: A physician specializing in the diagnosis and treatment of ailments affecting the nervous system (NCAA, 2015).

Primary care: A patient’s main source for continued medical care, providing continuity and integration of health care services. Primary care physicians typically include pediatricians and internists (NCAA, 2015).

Return to Learn (RTL): A counterpart to return to play, but which received less attention in concussion care management. RTL guidelines assume that both physical and cognitive activities require the use of brain energy and that, after a concussion, brain energy may be at a deficit due to trauma. RTL should be managed in a graduated fashion that fits the needs of the individual, within the context of a multidisciplinary team that includes physicians, athletic trainers, coaches, counselors, teachers, and administrators (NCAA, 2015).

Return to Play (RTP): Upon a student’s return to baseline, the RTP decision is based on a protocol of systematic increases in physical activity that includes both an incremental increase in physical demands and contact risk supervised by a physician or physician designee. Further, for this study, RTP will cover all aspects of student life, including, but not limited to, all co-curricular involvement (NCAA, 2015).

Symptomatic: The existence of symptoms or conditions suggesting illness (NCAA, 2015).

Unconscious: Unaware of oneself and one’s surroundings, lack the ability to notice or react to surrounding stimuli (NCAA, 2015).

The Role of Leadership in this Study

According to Starratt (2012), educational leadership should be guided by an “ethic of care” (p. 38). Those who possess a caring ethic believe that students have an inherent worth and dignity (Stefkovich & Begley, 2007, p. 212). Educational leaders should make informed decisions that always place the students’ best interests at the center of each decision. Starratt (2012) believed that schools committed to the ethic of care are willing to “reach beyond concerns of efficiency” and tackle “underside issues” that prevent the advancement of the institution and the overall well-being of their stakeholders (pp. 38–39). Aspects of concussion management for students in high schools are evolving, as is the understanding that is needed to achieve the ethic of care. However, Stefkovich and Begley (2012) suggested that when principals are confronted with ethical dilemmas, “the best interests of students figures prominently as a meta-organizer and ultimate influence on these administrators’ decision-making” (p. 220).

For relationships to grow and trust to be established between students and school leaders, a mutual respect must exist. According to Frick et al. (2012), this phenomenon only takes place when school administrators make ethical decisions that reflect the students' needs and are not self-serving (p. 215). Stefkovich and Begley (2005) suggested that school leaders consider the following themes with regards to respect: equality and equity, self-respect, tolerance, acceptance of frailties, appreciation and celebration of diversity, and a commitment to finding common ground (p. 216). The establishment of a comprehensive concussion care program represents a convergence of students' best interests and school leaders' moral decision-making. An ethically sound decision, which positively influences the students' experience, demonstrates the ethic of care and fosters a commitment to fairness and equality.

Currently, many concussed students return to the classroom with no protocol in place. Little attention has been given to the academic progress of a concussed student, as many educators remain unaware of concussions' implications for student learning (Halstead et al., 2013). Post-concussion symptoms typically interfere with a student's ability to complete assignments, to function in a classroom setting, and to interact with teachers and fellow students (McGrath, 2010). Thus, given the subjective nature of concussions, McGrath (2010) recommended that schools develop a comprehensive concussion protocol designed to deal with both athletic and educational concerns and ensures proper support for the concussed student-athlete.

In many cases, school leaders failed to provide professional development for faculty/staff to keep current with the issues students experience. Failure to provide these professional growth opportunities compromises an educational leader's ability to be

effective and work in the best interests of students (Frick et al., 2012, p. 211). Further, school leaders might face resistance from parents and teachers who will oppose a RTL protocol that includes a graduated level of schoolwork to be introduced to a concussed student. This concept may seem counterintuitive to parents and educators as the injured student will experience downtime and could be catching up on schoolwork. Again, the school leader must keep the best interests of the student in mind and be willing to engage in difficult conversations.

Giving suitable backing to a student undergoing the RTP or the RTL process after a concussion requires a synergistic group approach. The group ought to include the stakeholders discussed below.

- The student: The influenced learner ought to be brought in and urged to share his/her contemplations about how things are going, what’s more, side effects he or she is encountering. The learner ought to get input from whatever remains of the group that is suitable to his or her age, the level of comprehension, and enthusiastic status (Head Case 2015).
- Parents/Guardians: Parents and caregivers need to comprehend what a concussion is, that therapeutic consideration is required, that most students will show signs of improvement, the potential impacts on school learning and execution, and the significance of taking after direction from their students’ human services supplier all together to guarantee the fastest and best recuperation conceivable.
- Other parental figures (i.e., sports mentors, after-school or day care suppliers): People who watch over or are in charge of students after school hours can assume

a vital part in checking support in after-school exercises and watching any adjustments in conditions.

- Physician and other human services providers: Health care experts included in the student’s analysis and recuperation ought to give an individualized arrangement for a student undergoing the RTP or RTL procedure to oversee intellectual and physical effort taking after a concussion. As a student recoups, medicinal services experts can offer assistance to guide the slow evacuation of scholarly alterations or backings that might be organized as a component of the recuperation procedure.
- School medical attendant: Periodic observing of the student’s condition by the school medical attendant should proceed for as long as side effects are present. The school attendant is, additionally, an asset for other school experts who may have questions about their perceptions and may, likewise, be an essential contact to guardians or concussion specialists inside the group (Armijo & DeMarco, 2014).
- All instructors associating with the student (counting the physical training educator): Teachers can frequently watch changes in a student, including side effects that might decline. Instructors are, likewise, in a position to cooperate routinely with the student’s parents, subsequently giving a channel to get and impart data to them about the learner’s advancement and difficulties.
- School analyst and school advocate: School therapists and school guides can frequently help with recognizing administrations and assets to help the student and guardians or parents and encourage getting those administrations and assets

for them, including a 504 Plan or IEP. School analysts can likewise survey a learner’s present working and his/her scholastic requirements for full recuperation (Toporek, 2014).

- **Speech dialect pathologists:** Speech dialect pathologists can screen or distinguish students with a concussion who experience difficulty in the classroom, and identify changes in how a student conveys or cooperates with others. Discourse dialect pathology administrations may incorporate testing, giving classroom methodologies or adjustments, and direct administrations to a student (Stewart, Lohoar & Higgins, 2011).
- **School leaders:** The school leaders ought to name the inside individuals from the group and a caseworker to guarantee sufficient correspondence and coordination inside the group (Sprague-McRae & Rosenblum, 2013). The leader will likewise be in charge of favoring any changes by the student’s calendar and imparting arrangements on reacting to learners who have had a concussion (e.g., RTP and RTL strategy).

Limitations, Delimitations, and Personal Biases

Limitations of the Problem

One fundamental limitation encountered early on is the lack of time-tested literature on concussion management protocols/systems with regards to RTL. An additional limitation of this study is that students were interviewed to assess their perceptions about concussion care. The study also included the perceptions of classroom teachers or other school personnel who may be responsible for implementing part of a

RTL plan. This study only considered the setting of a Jesuit high school with data collection emerging from a Jesuit secondary school.

Delimitations of the Problem

Additionally, the study did not focus on students, but on the case of one concussion management protocol at one secondary Catholic school. This study, while it utilized some literature on athletics, was not solely about concussions in athletic events. In this way, the reader should not enter with a presupposition that this is only or all about athletics. It is important to note that the school involved in this study baseline tested every student, not just the athletes of specific teams. While the school did have a form of “concussion management protocol,” the school did not have a holistic baseline approach and, thus, the school (Central Catholic High School) investigated will have different information available.

Trustworthiness and Researcher’s Voice

As a privileged insider with a common language, culture, and identity, attention was given to the transformative effect that the research process might have on the researcher (Creswell, 2014). The researcher had the potential to shape the research by bringing to the inquiry paradigms or worldviews (Creswell, 2007). Therefore, engaging in the following practices to ensure trustworthiness maximized researcher expectation and rigor.

First, a dissertation support group provided opportunities for peer debriefing and served as an external check of the research process. This practice was designed to keep the researcher honest about the methods, interpretations, and other portions of the study (Creswell, 2007; Lincoln & Guba, 1985). Likewise, it was necessary to acquire the

assistance of a person outside of the researcher’s position to clarify any bias that may have gone unchecked—something akin to an external audit. (Creswell, 2007). Portions of drafts were shared with colleagues in the ILD program to review preliminary findings.

Modeling reflexivity clearly and responsibly by casting researcher position and representations in the writing process allowed the researcher to adhere to the qualitative method of bracketing experiences in the researcher’s journal. This process required the researcher to check or correct for any bias in the writing process. Discussions with the researcher’s chair and another member of his committee were meant to offer opportunities to discuss potential bias in the writing process.

Additionally, the researcher utilized member-checking to ensure the accuracy of the transcripts. Theme analysis and major findings were shared with each participant and feedback was solicited as it pertained to accuracy and veracity. Lastly, the study was triangulated by drawing from several data sources, methods, and theories to provide corroborating evidence and contribute to validation (Creswell, 2007).

Ultimately, this entire research process was positioned as an outward expression of the researcher’s worldview—a transformative approach utilized to determine whether a school’s leaders acted in the best interests of its students. Creswell (2014) suggested that transformative research contains an action agenda that changes the lives of participants, workplaces, and the life of the researcher (p. 9). While not an expert in the science of concussion, the researcher has a background in school leadership and in developing processes with the aim of improving students’ educational experience. This framework of approach is not always shared by colleagues and could create some tensions in the writing process because of issues related to priorities and agendas.

Summary

Concussions are known to play a significant part in the activities of students, including missing significant schooling activities. Luckily, numerous guiding principles for concussion management and RTP have been formulated. Since 2001, concussion investigations and research by clinical experts led to conventions attended by stakeholders at the International Symposium on Concussion in Sport (commonly referred to as CISG, an initialism for Concussion in Sports Group). The main goal has been to establish agreed-upon and acceptable guidelines for the evaluation, assessment, RTP, and treatment for sports connected concussions in athletes regardless of their age. Despite the participation of a varied group of stakeholders and the significant effects of environmental factors and policies on concussions, RTL and RTP concussion reporting investigations have had a narrow focus (McCrory et al., 2013). Especially, the literature tends to examine the trainers and athletes, intrapersonal issues, and interpersonal issues, with few studies of environmental aspects or policy, together with a blend of these elements, or inclusion of theory (Kerr et al., 2015). Undoubtedly, clinicians and researchers have demanded improved societal and cultural advances to tackling sports concussions and increase their magnitude to the public conscience (Murray, Pradeep Ambati, Contreras, Salvatore, & Reed-Jones, 2014).

In line with these, leaders at Jesuit secondary schools should take up measures that will protect their students' well-being. Cases of concussions should be taken with all the required seriousness and policies should be set up to reverse the adverse effects of a concussion on a student. Concrete steps should also be taken to ensure that the RTL protocol initiated after the occurrence of a concussion is suitable for the student. The

protocol started should not bring back the symptoms of a concussion but should, instead, restore all the student’s cognitive abilities. The leaders at the Jesuit secondary school should, therefore, apply means that ensure students are protected. In the event a concussion occurs, leaders should ensure all staff, parents, and students know proper ways of handling the concussion.

CHAPTER TWO: LITERATURE REVIEW

Although concussions are common among high school students and student-athletes, there is little consistency in how schools respond to this type of injury, and most have fallen short in their attempt to standardize a protocol. In collegiate athletics, however, “it has been reported that 19 distinct series of guidelines have sought to standardize the treatment of sports-related concussions” (Miller, Wendt, & Potter, 2011, p. 94). While these guidelines tend to be similar, Miller et al. (2011) noted major differences in the evaluation of the symptoms of concussions and the resultant RTP protocols.

The majority of resources available to high school administration and faculty are linked to sports-related injury and RTP and RTL protocols, creating inconsistencies in concussion protocols for non-athletes. Inconsistencies in concussion protocols become particularly apparent when one considers that, each year, U.S. emergency departments treat an estimated 173,285 sports- and recreation-related traumatic brain injuries, including concussions among children and adolescents from birth to 19 years of age. Even more significant than the volume of injuries are the negative trends for students as learners. Of particular concern is the fact that the number of diagnosed concussions for high-school-aged students (ages 14 to 19) rose by 200% (Head Case, 2015).

Concussions for high school athletes are most often linked to football (47% of all concussions occur while involved with this sport), as well as in other contact sports such as hockey and soccer (Head Case, 2015). However, there are other causes of concussions besides sports-related injuries, including falls on campus, fights, car accidents, and other impact-related events (Erdal, 2012). Compounding the issue are the developmental stages

of children and the fact that high-school-aged children are at a greater risk for concussion and have longer recovery periods (Centers for Disease Control and Prevention, 2010).

Unfortunately, there are limited resources that can guide school staff in determining RTL criteria and protocols for non-athletes. Very minimal guidance is offered for determining how to provide reasonable adjustments for supporting a student’s return to the classroom.

This study explored the case of one secondary school’s development and adoption of a concussion management system that provided teachers with a support protocol for a concussed student’s return to learning. In this study, teacher perceptions about the policy were collected and analyzed. This chapter provides a review of the literature on concussions and concussion management, protocols on RTP and RTL, the legal aspects surrounding concussion management protocols, and a conceptual leadership model of support for concussed students.

Concussions and Concussion Management Protocol

Concussions

The educational setting should provide a culture and climate that further develops the mind and body of a young person. Athletics and other co-curricular activities are designed to enhance the learning experience of young people. Hotz et al. (2014) defined a concussion as a type of traumatic brain injury caused by a bump or blow to the head which alters cognitive brain functioning (p. 2). On impact, the brain bounces or is jostled in the skull and causes damage to the affected cells. Further, McCrory et al. (2013) suggested that a concussion can be caused by “a direct blow to the head, face, neck, or elsewhere on the body with an ‘impulsive’ force transmitted to the head” (p. 555). The Centers for Disease Control and Prevention (CDC) reported that the number of

concussion cases doubled over the last decade. The American Academy of Pediatrics (2015) reported emergency room visits for concussions in children ages 8 to 13 years old doubled, and concussions rose 200% among teenagers aged 14 to 19 in the past 10 years. A list of concussion statistics illustrates an accurate representation of the prevalence of concussions in high school athletics. Over 3,800,000 concussions were reported in 2012, double the cases which were reported in 2002:

- 33% of all sports concussions happen at practice;
- 39% is the rate at which cumulative concussions are shown to increase catastrophic head injury leading to permanent neurologic disability;
- 47% of all reported sports concussions occur during high school football;
- 1 in 5 high school athletes will sustain a sports concussion during the season;
- 33% of high school athletes who have a sports concussion report two or more in the same year;
- 4 to 5 million concussions occur annually, with rising numbers among middle school athletes;
- 90% of most diagnosed concussions do not involve a loss of consciousness;
- an estimated 5.3 million Americans live with a traumatic brain injury-related disability (CDC) (Head Case, 2015).

Table 1

High School Sports and Corresponding Concussions Rate

Sport	Rate of Occurrence per 100,000 Athletic Exposures
Football	64–76.8
Boy’s Ice Hockey	54
Girls’ Soccer	33
Boy’s Lacrosse	40–46.6
Girl’s Lacrosse	31–35
Boys’ Soccer	19–19.2
Boys’ Wrestling	22–23.9
Girls’ Basketball	18.6–21
Girls’ Softball	16–16.3
Boys’ Basketball	16–21.2
Girls’ Field Hockey	22–24.9
Cheerleading	11.5–14
Girls’ Volleyball	6–8.6
Girls’ Gymnastics	7
Boys’ Baseball	4.6–5

Source: (Head Case, 2015)

Additionally, Table 1 provides a statistical analysis of the various high school sports and their corresponding rates of concussions. The numbers indicate the sports concussions taking place per 100,000 athletic exposures. An athletic exposure is defined as one athlete participating in one organized high school athletic practice or competition, regardless of the amount of time played (Head Case, 2015).

According to McAvoy (2011), the following are the signs of concussion which must be observed by the coach or any other legally authorized professional for relevant precaution measures to be taken:

- appears dazed, stunned, or disoriented, which is a demonstration of decreased alertness;
- forgetting very fast or demonstrating short term memory problems;
- exhibition of balancing and coordination difficulties;

- weak and slow response to questions;
- prone to seizures or vomiting;
- deprived level of consciousness.

Below are the symptoms of concussion that should be reported by the student-athlete to his or her coach or any other relevant professional:

- a feeling of a headache,
- nausea cases develop,
- dizziness and balancing difficulties,
- vision impairment,
- becoming oversensitive to light or noise,
- feeling foggy or sluggish,
- poor concentration and short-term memory challenge,
- sleepiness disturbance,
- becoming irritated or sudden behavior changes (Piebes et al., 2009).

Concussion Management Systems

According to McGrath (2010), the concussion management model is well established, and it is within the reach of many schools to enhance easy implementation of comprehensive programs meant to manage sport-related injuries. Such programs are designed for both athletic sport and educational concerns to facilitate safety in competitions and proper support for the affected student-athletes pursuing academic work during recovery.

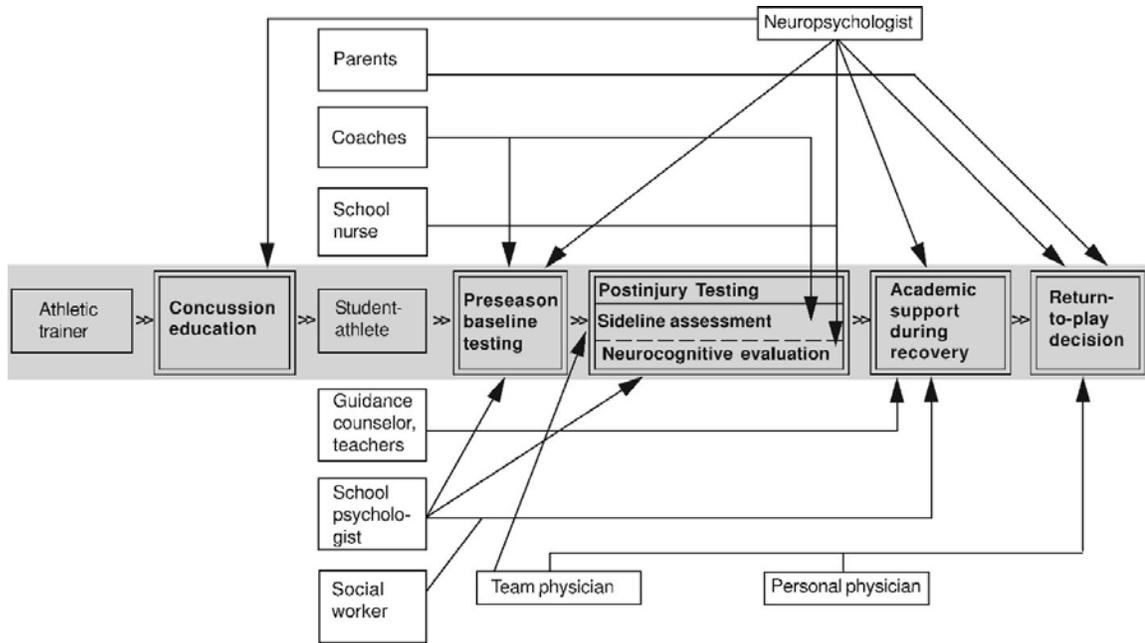


Figure 1. Model for management of student-athletes with concussions (McGrath, 2010)

In addition, Halstead et al. (2013) recommended a multidisciplinary team approach which includes a family team, a medical team, an academic team, and a school athletics team all working together on behalf of the concussed student. In either approach, these teams must determine the guidelines for a student-athlete’s return to the school environment. There are several accommodations that must be considered, including rest periods during the school day, the extension of assignment deadlines, postponement or staggering of tests, extended test time, accommodations for oversensitivity to light and noise, and exemptions from team practices and gym activities. However, Halstead et al. (2013) acknowledged the need for further research with regards to RTL and suggested that “studies comparing outcomes in school settings that have concussion management teams with case management versus those that do not would also be of value” (p. 956). While limited research has been conducted regarding RTL, the topic of RTP has received greater attention given the high profile of school athletics.

While specific RTP protocols are relatively established, there is still a clear need for a specific RTL protocol that makes use of available research. McGrath (2010) proposed the establishment of a point person to act as a school concussion recovery coordinator. The most appropriate person to fill this position is typically the athletic trainer (AT), given his/her awareness of the seriousness of concussions and training in concussion care. The author noted, “The AT is ideally positioned to be a primary source of information about concussion recovery, not only for the student-athlete but also for one’s school colleagues” (p. 492). ATs must then be given the authority to dictate educational protocol for concussed students. This way of proceeding will require ATs to communicate effectively with physicians and to translate the medical language into the educational environment. Master et al. (2012) stressed that a written concussion care plan, including a prescription for cognitive rest, should be provided to the parents and educators of the concussed student (p. 2).

Given the rise in the number of diagnosed concussions, there has been an added effort on the part of schools to develop concussion care programs. While there is no consensus with regards to structure, best practices suggest that the establishment of a care management team would benefit a concussed student returning to the academic environment (McAvoy, 2012). Halstead et al. (2013) stated,

It remains essential that all schools recognize the importance of team management for a student after a concussion. This also ensures that all students recovering from the concussion have been assigned to staff who will be responsible for smooth re-entry to school. (p. 951)

McGrath (2010) suggested that concussion management teams be comprised of a school administrator, athletic trainer, teachers, parents, a guidance counselor, and the school nurse, if applicable.

Baseline Testing. According to Valovich and Gioia (2010), baseline individual computerized neurocognitive testing is offered by the Immediate Post-Concussion Assessment and Cognitive Testing (ImPACT, Pittsburgh, PA), Head Minder (Head Minder, New York, NY) CogSport (CogState Ltd, Melbourne, Australia), and Automated Neuropsychological Assessment Metrics (ANAM, Défense, and Veterans Brain Injury Center, Washington, DC). This type of measurement provides a preinjury assessment of the cognitive abilities which can be disturbed by a concussion. This established testing controls for the effects of medications, learning disabilities, attention deficit/hyperactivity disorder, among other pre-existing conditions, and can be conducted along with a brief educational meeting (Gamble, 2011).

Post-Injury testing: Sideline assessment and neurocognitive evaluation. In the event of a concussion cases, the AT immediately assesses his/her athlete for the presence and severity of concussion signs (ORCAS, 2011). A simplified and precise formal protocol, such as the Standard Assessment of Concussion or Sports Concussion Assessment Tool, which takes only minutes and includes provocative exertion testing, is recommended. This process is intended to determine if running or any other sports maneuvers might cause recurrent symptoms in an athlete who seems to have fully recovered while resting on the sideline during the same event (Meehan, Mannix, Stracciolini, Elbin, & Collins, 2013).

However, the neurocognitive evaluation protocol involves initial testing within the first few days after the injury. Lovell and Fazio (2008) claimed that, in case the athlete has not undergone thorough baseline testing, returning to expected performance levels should be based on normative scores for age, sex, and consideration of factors such as a learning disability, attention deficit/hyperactivity disorder, or any other pre-existing condition related to the student-athlete’s general level of academic achievement (Master et al., 2012). Consulting a clinical neuropsychologist is crucial especially when making critical clinical judgments. Subsequent retesting tracks resolution of the athlete’s subjective symptoms and improvement in cognitive functioning and provides useful information to school management concerning the need for accommodations (Popoli, Burns, Meehan, & Reisner, 2013).

Giving feedback to the student-athlete and parents regarding these results often assists them in appreciating the extent of the initial symptoms, cognitive impairment, and the existence of prolonged difficulties when recovering (Meehan et al., 2013). Once the athlete is fully symptom-free and regained the expected level of cognitive functioning while at rest, a 20- to 30-minute physical exertion test (including running, push-ups, sit-ups, and other sport-specific physical maneuvers) is supervised by the AT (Piebes et al., 2009). Whenever the athlete remains free from symptoms and retains neurocognitive performance level after such exertion, his/her recovery is deemed complete.

Concussion Management Protocol for Return to Play

Return to Play. There is general agreement that schools should have a RTP protocol for student-athletes (Davies, 2011b, p. 14). Sports-related concussions fall second only to automobile accidents as the leading cause of traumatic brain damage

among 15- to 24-year-olds (Ballantyne et al., 2012). Nationally, during the 2009 and 2010 football seasons, 14 deaths occurred as a direct result of brain injury sustained during play. Furthermore, at least 50 youth football players have died or suffered severe head injuries since 1997 (Prevacus, Inc., 2015).

RTP is a process that begins after all symptoms are resolved and the student-athletes' brain functions have returned to normal paradigms (Faure, 2010). While there is currently no gold standard for concussion care management, there have been many advancements in treating concussions in recent years (Doolan, Day, Maerlender, Goforth, & Gunnar Brolinson, 2012, p. 2). These improvements are critical given the recurrent risks of concussions and the threats posed by second impact syndrome (Faure, 2010). It is, thus, crucial for medical care providers, including ATs, to have a thorough knowledge of concussion management protocols, and to implement processes that safely return a student-athlete to competition (Doolan, 2012). Given that concussions are subjective in nature, it is also important to individualize RTP factors and consider all forms of treatment. Doolan et al. (2012) encouraged a team approach to concussion care management to ensure all relevant aspects of an individual student's concussion are addressed.

To determine if a student-athlete sustained a concussion, there is clear support from the medical community regarding computerized testing. To make testing procedures more practical, computerized testing quickly and accurately establishes a baseline for a student's normal neurological function. Given technological advances such as computers and smartphones, “the computerized modality becomes more familiar and ecologically valid than classical paper-and-pencil methods” (Rahman-Filipiak & Woodward, 2013, p.

315). In particular, computerized programs such as ImPACT, developed in the early 1990s by Drs. Joseph Maroon and Mark Lovell, allow athletic trainers and physicians to diagnose concussions immediately. The 20-minute test is a competent concussion management system that measures mental reaction time, coordination, and memory function (Ballantyne et al., 2012). The ImPACT test can also be utilized in post-concussive care to determine a student-athlete’s readiness for RTP. “Although the ImPACT test provides a data point for student concussion care management, a holistic concussion management system is needed to move forward with a proper RTL protocol. This includes, but is not limited to, the following key areas: (1) a gradual return to sports participation program, (2) a referral to a primary care physician, and (3) a referral to a concussion specialist.

Sady et al. (2011) recommended that the policy should at least contain the following components: (1) training and certification of coaches in concussion management; (2) educational resources and informational sessions for parents/guardians, student-athletes and other stakeholders on using pre-season baseline assessments in aiding the evaluation, management and recovery process; and (3) understanding symptoms of concussion and authorization for return to play.

Also, Piebes et al. (2009) acknowledged that schools should hold an informational conference before the beginning of each athletic season about concussion management and how pre-season baseline assessments can aid in the evaluation, management, and recovery process (Meehan et al., 2013). The meetings may involve guardians, coaches, parents, neuropsychologists, athletic trainers and physical therapists and physicians (Lewandowski & Rieger, 2009). Similarly, when a student who wishes to participate in

an athletic activity, his/her parent or guardian should annually sign an acknowledgment of their receipt and review of concussion and traumatic brain injury information and return the signed acknowledgment form to the school (Master et al., 2012).

On the same note, any medical professional authorized to decide when the student-athlete can return to play must have completed training in the evaluation and management of concussions. Further, authority is granted to the coach, athletic trainer, licensed physician, licensed physical therapist, and other trained sports officials. They are supposed to assist in recognition of the signs and symptoms of a concussion and be designated by the institution or school to ensure that a student-athlete exhibits symptoms of concussion (Lewandowski & Rieger, 2009).

Furthermore, the moment a student-athlete exhibits signs of a concussion, he/she must be kept from further participation by the coach. After that, he/she should not be allowed to return for practice until evaluation and clearance are presented in writing to legalize his/her return to play (Sady et al., 2011). The permission for the return to participation must be authorized by the medical professional (under the Safety and Youths Sports Act) in line with the training in the evaluation and management of concussion (Davies, 2011a). A coach who violates the Safety and Youth’s Sports Act will be banned from handling any athletic activity for the rest of the season. A second violation will yield him/her a double punishment where the suspension will cover both the current and the next season. When the coach violates the law for the third round, he or she will be permanently banned from taking part in any athletic activity.

Managing Concussions

Concussion Management Protocol for Return to Learn

Limited research has been conducted in the area of RTL, creating a challenge for school leaders to identify the optimal way of proceeding (Grady, 2010). Generally, a student’s return to the classroom is an individualized process requiring both cognitive and physical rest (Miyashita et al., 2014). Some students are able to return to learning quickly, and may actually need the structure of a school environment in order to stimulate cognitive recovery (Master et al., 2012). Conversely, other concussed students might need a controlled escalation in cognitive activity, so as not to exacerbate their symptoms. Given the subjective nature of concussions, McGrath (2010) recommended that schools develop a comprehensive concussion protocol designed to deal with both athletic and educational concerns that ensures proper support for the concussed student-athlete.

In the secondary school setting, concussion care management has typically been administered by a certified AT. These caregivers have been the gatekeepers in determining when a student is fit for RTP. However, ATs typically have had very little input on a student’s return to the classroom or RTL. In a study conducted by Williams, Welch, Parsons, and Valovich McLeod (2015) (2015), the authors identified two key findings. First, the study demonstrated caregivers (ATs) who are employed directly by the school had greater perceived familiarity with academic accommodations than those who were employed via an outside agency (p. 6). Second, the study identified ATs felt as though they should be included in the RTL process. ATs believe they are prepared to collaborate with school personnel, such as teachers and counsellors, to ensure proper academic accommodations (p. 6).

The study by Williams et al. (2015) is an important consideration for school leaders. The study demonstrated not only ATs’ desire of to be involved with RTL, but it also showed the growth of the AT position and the ability to provide a comprehensive approach to concussion care management. In essence, the merging of RTP and RTL under the supervision of a school-employed AT allows for more frequent and effective communication with school administration and support staff (p. 6).

The number of teenagers diagnosed with concussions increased by 200% in the past decade (Head Case, 2015). Since many of these injuries occurred during athletic participation, schools developed concussion management programs to determine when an athlete is ready to resume athletic competition, commonly referred to in the industry as RTP, particularly from the vantage point of the school leader. The prevalence of concussion injuries, coupled with recent legislation, forced school leaders to consider the development of protocols or policies to help protect their students as they reenter the classroom after a head injury (Tarm, 2014).

A compilation of statistics by the Southwest Athletic Trainers Association (2015) highlights the magnitude of concussion-related injuries. It showed

- About 8,000 children are treated in emergency rooms each day for sports-related injuries.
- Female high school soccer athletes suffer almost 40% more concussions than males.
- Women basketball players sustain 240% more concussions than their male counterparts.

- Emergency department visits for concussions sustained during organized team sports activities doubled among 8 to 13-year-olds between 1997 and 2007 (Lindley, 2014).

It is because of the increasing awareness and incidence of concussions within school-aged children that the school studied in this dissertation embarked on a unique approach to both RTP and RTL.

Best Practices: Important Components of Safe and Effective RTL

A complete resting of the brain comprises of not taking part in school nor having any homework. “Screen time” in the form of using mobile devices, watching the television or engaging in the playing of video games should be discouraged. The student may, therefore, require rest in dark places free from any forms of overstimulation either visually or auditorily (Faure, Moffit, & Schiess, 2015). The student should also rest, ensure regular sleep cycles, and also take naps at least three times a day. The rest should, however, not be too much as it would lead to extended post-concussive symptoms that would take longer to resolve. The seclusion should also not last too long and should mostly take periods of 2 to 3 days (Wasserman et al., 2016).

Controlled and Gradual Monitoring Re-Introduction of Cognitive Activity

In agreement with the study by Wasserman et al. (2016), students must be advised on the importance of paying attention to activities that increase or cause a return of symptoms. The student should develop an increasing methodology of taking part in the cognitive activities that would involve short periods in 10- to 15-minute augmentations. The aim of this would be to try to bring back all the cognitive demands while, at the same time, avoiding provocation of a return of the symptoms. The environment is controlled,

and, in situations when a student can tolerate them, interactions are paramount to reduce feelings of loneliness that may be experienced (Master et al., 2012)

McAvoy (2012) suggested students attempt homework in increasing times of 20 to 30 minutes with opportunities for rest in order to handle small parts of cognitive activity without triggering symptoms. If the student manages to finish the homework for some days, the next step can be initiated (Erdal, 2012).

Returning to school for half a day is another option for a gradual return to school activities. Communication should first be carried out among the medical providers, parents, school leaders, and the student (Faure, 2010). This should be done to determine a proper RTL plan. School leaders and the student should try to alleviate the student’s pressure and anxiety due to missed school days. The returning student may, first, be allowed to attempt simpler coursework and slowly start on the more difficult courses (Stewart et al., 2011). Any activities that may cause or increase the symptoms of the concussion (i.e., PE, music, and computer classes) should initially be avoided. To accommodate the student in a secondary school, the student may be allowed frequent breaks in quiet commons locations and the sharing of meals with one or two friends in smaller gathering spaces. Areas like the nurse’s office or the school library can be ideal places for smaller groups of students to gather and work with a concussed student (Seidman, 2006).

The student may also be allowed to leave a class early to avoid noisy corridors and overcrowded areas. The conditions mentioned earlier would allow the student to go through the RTL process without the reappearance of symptoms. Later on, the student

can move from the part-time attendance to an increase in classes and workload (Shapiro & Stefkovich, 2011).

Full-Day School Attendance

At a particular time, the student should have the ability to attend all classes without the symptoms reappearing. The academic accommodations can also be slowly reduced. Once the student has fully gone back to school without the return of symptoms, the usual workload may be completed. The student should, however, be kept under observation and take the activities at a slower pace until he or she builds up the cognitive workload. Once this is finally achieved, the RTP protocol can begin. It is important to apply concussion recovery steps in an individualized manner (Sergiovanni, 1992). Students may take the steps in any order as dictated by their symptoms. Student may also remain at any of the given steps for as long as they need. In circumstances where the symptoms return, the student should have the ability to stop the triggering activity or return to the previous step for a day or so.

Challenges to Implementation: RTL Implementation Issues

Currently, many concussed students return to the classroom with no protocol in place. Little attention has been given to the academic progress of a concussed student, as many educators remain unaware concussions' implications for student learning (Halstead et al., 2013). Post-concussion symptoms typically interfere with a student's ability to complete assignments, to function in a classroom setting, and to interact with teachers and fellow students (McGrath, 2010). Thus, given the subjective nature of concussions, McGrath (2010) recommended that schools develop a comprehensive concussion

protocol designed to deal with both athletic and educational concerns and that ensures proper support for the concussed student-athlete.

In many cases, school leaders failed to provide professional development for faculty/staff to keep current with the issues that concussed students experience. Failure to provide these professional growth opportunities compromises an educational leader’s ability to be effective and work in the best interests of students (Frick et al., 2012, p. 211). In other words, while engaging in difficult conversations that center around a students’ academic readiness and fear of falling behind, educational leaders must place the health and well-being of all its students at the center of any action even if it means falling behind. Further, school leaders might face resistance from parents and teachers who will oppose a RTL protocol that includes a graduated level of schoolwork to be introduced to a concussed student. This concept may seem counterintuitive to parents and educators as the injured student will experience downtime and could be catching up on schoolwork.

A study by Corden, Halstead, and Walter (2013) suggested that, in addition to community education, removal from play, and RTP, school leadership should consider adding “return to cognitive activity,” or RTL as a fourth element to a concussion protocol. This added element acknowledges the metabolic mismatch causing concussion symptoms and encourages limited cognitive effort including no computer or video gaming or cell phone use, relaxation, and increased sleep until symptoms resolve. Further, return to cognitive activity intersects with RTL as both elements call for time off from school with reduced or no homework. These approaches call for increased

communication among school leaders, the attending physician, the AT or school nurse, and parents, to optimize the return of the student to academic life.

The topic of RTL has largely been ignored in concussion protocol research, and, as a result, many concussions go unnoticed and students return to the classroom before they are ready to learn (Carson et al., 2014, p. 314). The authors stated that “even when appropriate guidelines are followed, and management plans are given by physicians, many students return to learning or sport too soon” (p. 314). Further, Carson et al. suggested there is a need for further research to determine the best management plan for the return of concussed students to the classroom (p. 314). An effective protocol must consider the implications for a student returning to the classroom as well as an efficient communication system from school leadership to inform teachers of prognosis and expectations.

The Role of Administration in RTL

Significance of an academic concussion management plan in schools. A best practice in managing student concussions is for all faculty and administrators to know and clearly understand their role and how to proceed. This begins with having the school leader function as the champion for concussion protocol enforcement supported by a concussion management leader to lead training, implementation and documentation procedures.

Once the necessary protocol is established, mandatory annual training for all faculty and staff should occur. The school leadership should be actively involved in these training sessions and keep official records of the trainings and attendance. Reference guides should be provided at the training, made readily available in administration and

counseling offices, and posted visibly in easy-to-access faculty and staff locations such as in coaches’ offices, administration, locker rooms, training facilities, and the counseling department. These reference materials should include a checklist that is customized for the staff based on the location where the information is posted and for the role-specific training sessions.

The following is a best practice checklist of responsibilities for the school leadership in concussion management suggested by Upstate University Hospital in conjunction with the Brain Injury Association of New York State:

- Assume the role of concussion management champion, and designate a protocol leader to support the school leadership;
- Establish a master concussion-tracking document to log all student concussions and process steps taken;
- Conduct annual all-faculty/staff training, documenting sessions and attendance;
- In the training, activate all faculty and staff to take all necessary precautions to minimize the risk of school-related concussions;
- Provide parents with information about concussions and tips to minimize risks outside of the school environment;
- And once a student is identified as possibly having a concussion, the school leadership must:
 - Identify the student’s teachers, counselors, coaches and moderators for other student activities;
 - Inform them of the student’s possible condition and that the student cannot participate in any schoolwork or activities until the school leadership has been

notified in writing by the parents or legal guardian of the results of a medical examination;

- The school leadership must notify the students’ teachers, counselors, coaches and moderators for other student activities of the student’s condition and file the official notification paperwork in the student’s official school records and master school concussion tracker;
- If no concussion is diagnosed, the student may return to all classroom and student activities as determined by the physicians and parents;
- If a concussion has been officially diagnosed, the school leadership should establish a collaborative team of the students’ teachers, counselors, coaches and moderators for other student activities, as well as the parents;
- This team must follow the school’s concussion management system including filing signed forms for each step of the student’s safe re-entry into learning and activities. (SUNY Upstate Medical University, n.d.)

While a best practice checklist is useful in managing student concussion, of particular importance is the role leadership plays in serving as a champion and lead supporter for a successful concussion management system. Similarly, a teacher serves as the first defense for supporting and delivering on the concussed students’ academic adjustment.

Teacher’s Role in RTL

Academic support during recovery. Due to their frequent contact with students, it is imperative that teachers are included in all efforts to support concussed students. The following is a summarized checklist of best practices for teachers in working with a

student who has been diagnosed with a concussion as recommended by the Hastings and Prince Edward School District of Canada (2014):

- Be aware that following a concussion, a student experiences mental and possibly physical exhaustion that may vary from day to day. It is important to identify when a student’s energy level decreases and make sure they take a break or have lunch in a quiet place, or even a nap.
- The collaborative team supporting the student should reduce schoolwork, homework or even course load commensurate with the student’s energy level. This could include breaking up assignments into manageable portions, and helping the student organize and negotiate workload and deadlines.
- Excuse the student from physical education or any other activities where a risk for head injury may exist until the student is fully recovered.
- Allow for extended time and a quiet room on tests.
- Offer alternate seating in class to minimize distractions and avoid direct sunlight if they are experiencing any light sensitivity. They may need to wear sunglasses indoors.
- Offer the option of moving between classes before or after the main rush. The student may wish to have another student accompany them and help them with their books.

Managing Communications: Stakeholders of the Management of Concussions

In managing communications with students who experienced an injury that may require extended absence from learning, a support team is necessary to manage his or her health conditions, especially if that condition deters his or her ability to do academic

work (Master et al., 2012). Figure 2 illustrates the intersection of each of those teams critical to a proper communication system.

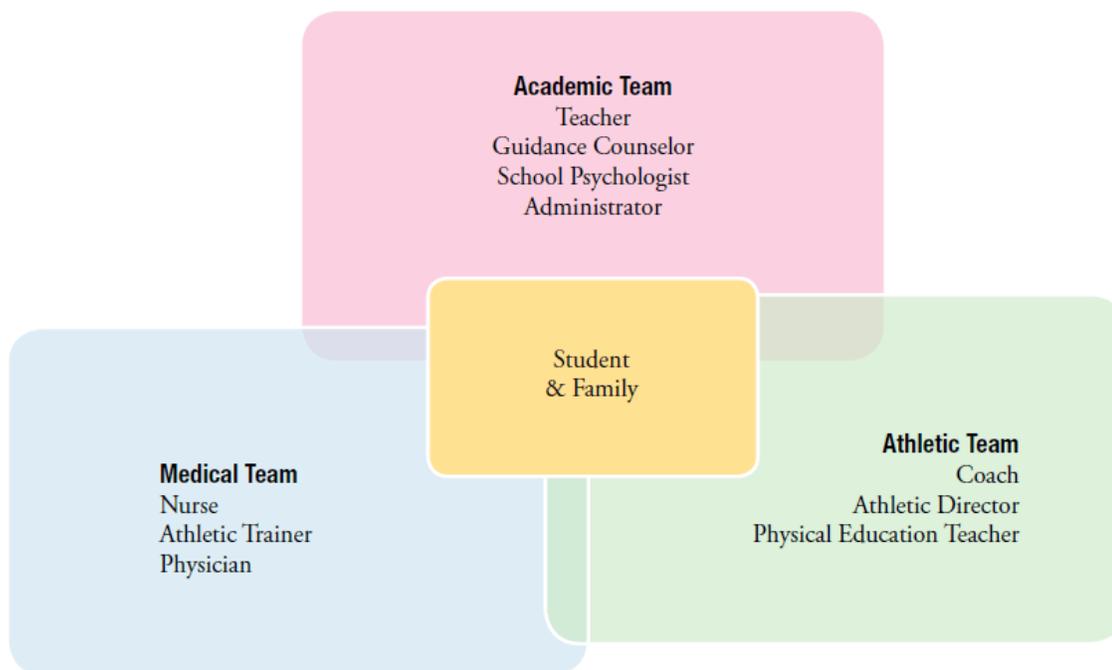


Figure 2. Concussion management stakeholders. From “A school administrator’s guide to academic concussion management” (p. 4) by Nationwide Children’s Hospital. Copyright 2012 by Nationwide Children’s Hospital.

First, at the center of the above illustration, reside the student and the legal guardians. Here, both must be honest, regularly provide information concerning symptoms, academic difficulties and carry out the assigned duties requested of them by other team members. Next, the academic team plays a critical role in communicating conditions that adhere to the recommended academic adjustments with all necessary members engaged in supporting the recommended process. Third, the athletic team monitors symptoms, assists in the coordination and supervision a student-athlete’s safe return to play, and communicates student progress—specifically with regards to the cognitive ability of the concussed student. Finally, the medical team manages and

diagnoses the student’s injury, directing medical and academic recommendations for monitoring in-school symptoms, changes in health status and determining if it is appropriate for the student stay in school or whether he or she needs any health-related adjustments. Providing the school with information regarding the student’s progress, the duties of the team members co-relate to some extent. For this reason, a clear line of communication should be developed so that information is properly transferred among all parties (Oregon Concussion Awareness and Management Program, 2010).

Managing politics: Developing a plan. The core academic concussion management process starts by injury identification and timely reporting to the concussion management leader (CML) so that the process may begin (McGrath, 2010). After the student goes back to school, the necessary assessment must be performed to determine his or her medical and academic status (Halstead et al., 2013). Once his or her needs are addressed, a plan with accommodations can be developed and presented to teachers and coaches (see Appendix E for an example). The basic framework of the entire process is elaborated in the steps below.

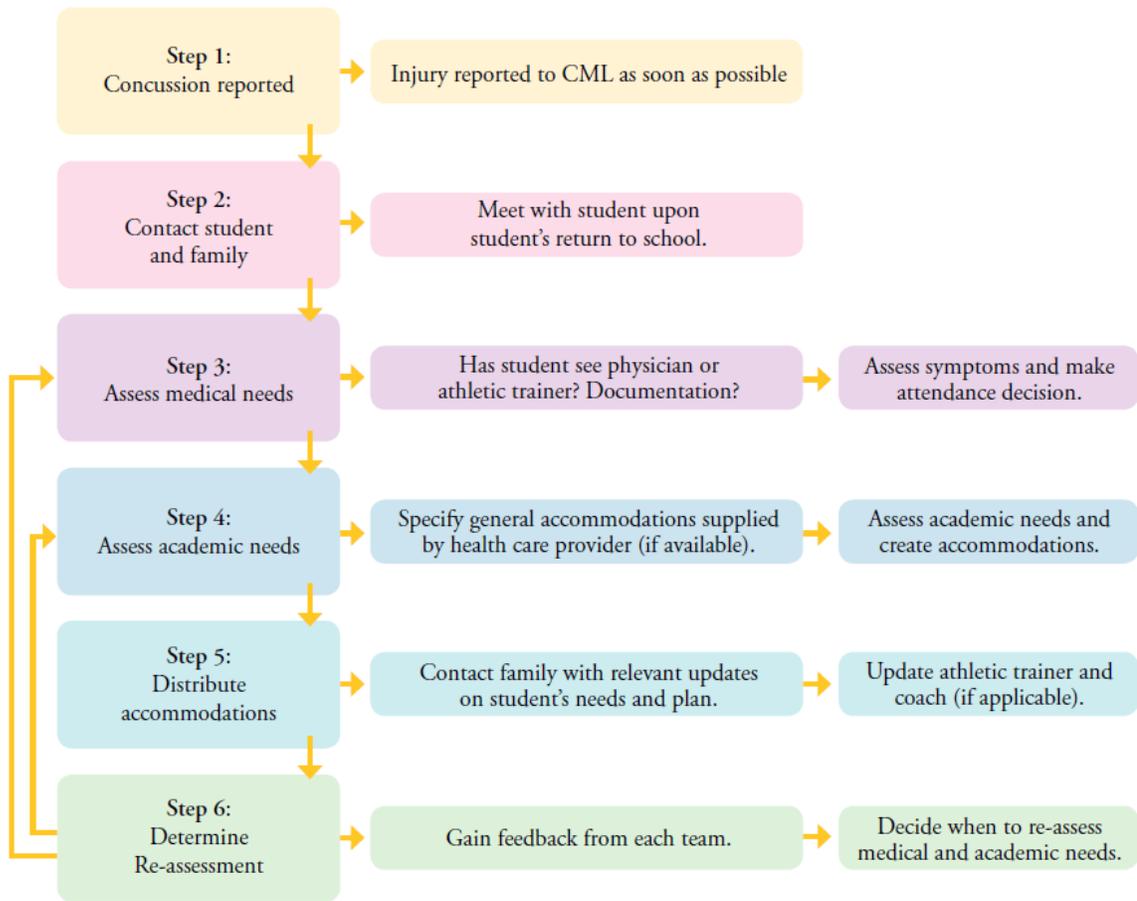


Figure 3. Basic academic concussion management process. Reprinted from “A school administrator’s guide to academic concussion management” (p. 7) by Nationwide Children’s Hospital. Copyright 2012 by Nationwide Children’s Hospital.

According to the Oregon Concussion Awareness and Management Program (2010), there are two models for concussion management processes discussed in this literature review, both which involve the CML, who serves as the central coordinator for all parties and presides over the process within the timeframe stated in the plan (Sady et al., 2011). For the first variation, the two-leader model makes use of the expertise of professionals on each of the medical and academic teams to assign the assessment duties, and also one leader to undertake the CML duties. However, in the second variation, there is a one-leader model where the CML is the central administrator who may be required to do both academic and medical assessments (Piebes et al., 2009).

Setting the tone for the culture of the school: The two-leader model. The models named above are effective in schools which are well equipped with plenty of resources for them to distribute the responsibilities among the experts in various areas (McAvoy, 2011). For instance, a medical leader deals with medical issues, whereas an academic leader will handle the academic-related needs. Any of the two leaders may also serve as the CML or share the related duties (McGrath, 2010). An essential basis for developing this model is proper and regular communication between the medical and academic leaders and a clear overlapping of other related duties within the process. The recommended team members to make competent medical leaders are the school nurse, the AT, and an administrator.

The one-leader model is the most suitable for schools which lack a full-time school nurse, guidance counselor or have few resources to split the medical and academic responsibilities (Popoli et al., 2013). The model, therefore, gives the CML a double responsibility of attending to both simple medical assessment (where there is no qualified medical personnel) and an academic assessment (when the qualified academic personnel is not available). For this reason, the CML may be trained for both duties by qualified personnel and maintain effective communication among them for the entire management process. (Sady et al., 2011). Making an informed decision on who should be the CML is the core consideration of enforcing this model. Its recommended team members include guidance counselors, administrator, nurses, and school psychologist together with a committed administrator serving in the position of CML in consultation with other team members.

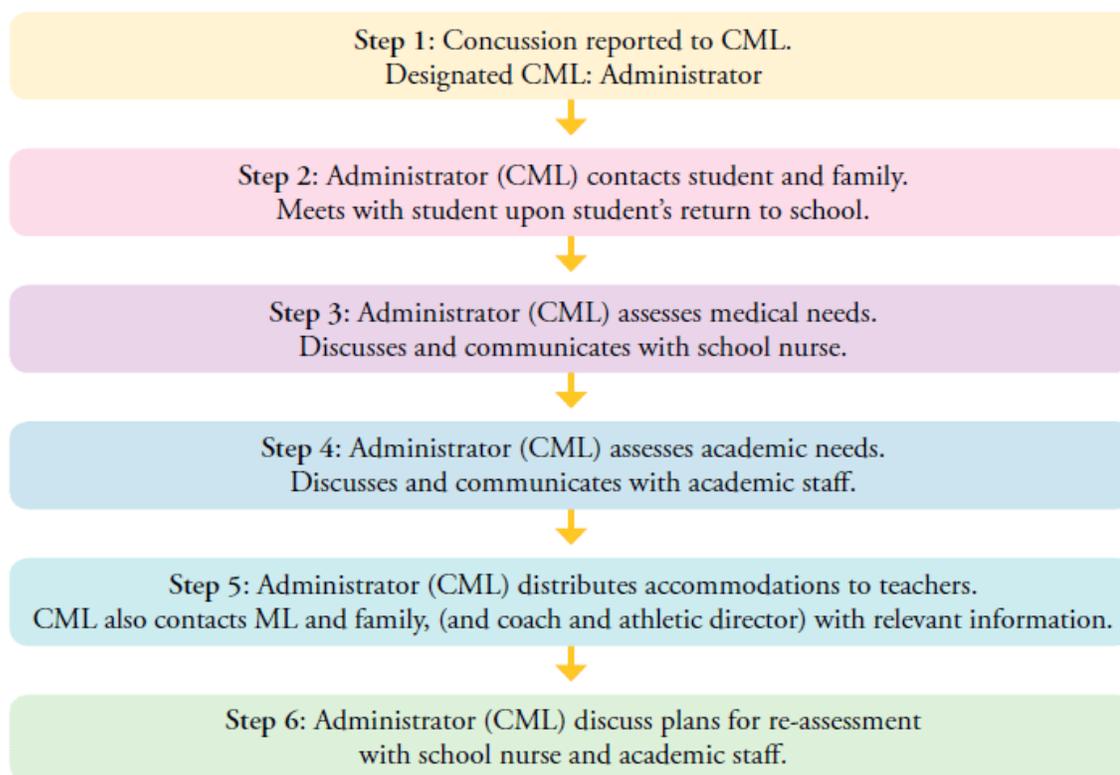


Figure 4. Example of the one-leader model. Reprinted from “A school administrator’s guide to academic concussion management” (p. 8) by Nationwide Children’s Hospital. Copyright 2012 by Nationwide Children’s Hospital.

Communicating confidential information. There are suitable ways of passing across sensitive medical and academic information among the team members.

Information regarding a student’s health status and academic career is protected under the Health Insurance Portability and Accountability Act and the Family Educational Rights and Privacy Act in that order (Oregon Concussion Awareness and Management Program, 2010). The two pieces of legislation demand that team members should be careful about what they say, whom they say it to, and where they speak. They have to ensure they cannot be overheard and share only the essential information to manage the scenario. In essence, school officials are protecting student medical information and must ensure that

it is kept confidential and only disclosed with personnel who have a right or necessity to know the information.

It might be helpful for an administration to highlight the suitable forms of communication in such kind of circumstances (Halstead et al., 2013). There are various ways of communicating a student’s state through channels such as emails, phone calls or even in person, each with its strengths and limitations (see Appendix D for an example). It should be ensured that the entire staff understands how to communicate properly when allowed to take part in the plan.

Depending on the type of communication in a group, there are some things that can be done to strengthen and make the team successful (Sady et al., 2011):

- Educating all school staff to understand and determine the proper way of implementing the major objective of academic concussion management. This assists to reduce the chances of a student suffering from a permanent problem to his or her academic work as a result of concussion (Hossler, 2007).
- Educating all school staff regarding concussions and how they influence academic work. Ensuring that there is a general understanding of the language and school protocol that have to adhere to in the management plan (Halstead et al., 2013).
- Offering specialized training to the management team members.
- Providing a written guide of duties and expectations to team members.
Committing oneself to explain the process to every team member before the starting of a plan to enhance better compliance.
- Emphasize on each team member’s duty and responsibilities for adequate and equal participation in the plan.

Legal Aspects of RTL and RTP

All 50 states and the District of Columbia adopted laws protecting young athletes from returning to play prior to an appropriate brain-recovery period (Gamble, 2011). Each law maintains a similar stance—prevention, education, and protection, yet there is no standard approach to compliance management and implementation of the law. In addition, as laws change, so, too, do the priorities of the laws. As an example, as of the time of drafting this document, only eight states had expanded concussion legislation to include return to learn or return to school requirements (American Academy of Pediatrics, 2016).

As such, while returning to play remains the main focus of most concussion protocols, it is quickly becoming partnered with its educational counterpart—the notion that a student-athlete is a student first and foremost and an athlete secondarily. A 2015 *Clinical Pediatrics* article reiterated the unique needs of students as learners and found three main themes in concussion management literature. These themes were the ideas that concussion protocols for adults are not appropriate for children, children require more conservative protocols, and protocols for children must include a return to both school and sport, not one or the other (p. 785). Thus, while legislation is written to broadly sweep across sports and age groups, it must also be carefully balanced against medical expertise on the unique medical needs and conditions of children and adolescents.

Emerging litigation sought to address the need for a more comprehensive review of concussions in students engaging in athletic activities (Tarm, 2014). Some cases and new legislation in California (and throughout the United States) sought to address this issue of concussions in students in school settings. Of particular note was a suit filed by

Daniel Bukal, a star quarterback at Notre Dame College Prep in Niles, Illinois, until 2003. At the time of this study, Bukal suffered from migraine headaches and memory loss, and he attributed these ailments to his high school football experience. This litigation filed against the Illinois High School Association alleged that the association did not have concussion protocols in place, putting Baikal and other high school players at risk, and those protocols remain deficient. The claim called on the Bloomington-based association to tighten its rules regarding head injuries at the 800 high schools under its governance. The suit sought reform and did not pursue specific monetary damages (Tarm, 2014).

In 2009, the state of Washington passed the first concussion-in-sports legislation. The Zachary Lystedt Law requires medical clearance of youth athletes suspected of sustaining a concussion before they can return to practice or play. This law was enacted as a reaction to negligent concussion care on the part of the Tacoma School District. Additionally, a lawsuit resulted in a settlement being awarded to the Lystedt family amounting to \$14.6 million (Ballantyne et al., 2012). Between 2009 and 2013, all 50 states and the District of Columbia passed laws on monitoring concussions in sports for youth and high school athletes (National Conference of State Legislatures, 2014).

On July 21, 2014, California Governor Jerry Brown signed into law an amendment to the existing youth sports concussion safety law (AB 2127), adding Education Code section 35179.5 and amending section 49475, to limit full-contact football practices in middle and high schools. This amendment identified protocols and regulations to deal with concussed student-athletes, specifically a RTP protocol for students who sustained a concussion and imposed limits on the number of full-contact

football practices throughout a school year. Assemblyman Ken Cooley authored the bill, motivated by the concerns of parents worried about the dangers associated with concussions, including long-term brain damage, early onset dementia, and the increased propensity to sustain further concussions (Armijo & DeMarco, 2014). The law requires a school to remove an athlete from athletic activity immediately until he or she could be evaluated and cleared by a licensed health care provider. Athletes must also annually fill out a concussion and head injury sheet that is signed by the athlete and his/her parents before athletic participation is allowed.

Lowrey and Morain (2014) noted the vast disparity of application of concussion laws when they completed an empirical study of state-level experiences in concussion legislation implementation throughout the United States. The authors conducted interviews within 42 states with youth concussion laws and found that many states struggled with implementation timelines, compliance, and the overall understanding of who *owns* proper concussion management. Thus, while concussion laws may look quite similar to the books, implementation can vary widely from state to state, county to county, and district to district.

Within what is considered standard concussion legislation, states varied in times required for implementation, much of which depended on the state’s infrastructure of governing board and sports associations to help with implementation practices. One important realization was that, when stakeholders, like school leaders and athletic trainers, were involved in the legislative process, there was faster implementation.

Drafting concussion legislation proved to be a troubling feat when it came to implementation, as the language was often vague or difficult to apply without an existing

athletic association-type organization to provide oversight and structure. Questions arise about who is a *qualified medical provider*, the timeline for concussion assessment, and who enforces the policies. The authors noted one state’s law referred to “youth” but failed to define the term, so application became problematic. The same can be said for legislation that may or may not pertain only to public school athletic events or that which expands the scope to cover community leagues, church leagues, or activities outside the typical school structure.

The authors also noted three obstacles to compliance with concussion legislation: provider access, parent cooperation, and awareness. As such, rural areas with less access to medical personnel could be problematic. Parents who seek lenient doctors or visit multiple doctors seeking medical release might also pose a problem. Last, with a law that deals with so many moving parts (coaches, parents, players, administrators, doctors), it is possible compliance is quite problematic in practice (p. 294).

Whether or not concussion laws work is a different question. Lowrey (2015) answered this by stating, “return-to-play legislation is not likely to change sports culture on its own” (pp. 64–65). She noted that concussion laws may promote a cultural shift away from a “culture of resistance” to one focused on player safety. A September 2015 *New York Times* article reported on several school districts in Missouri, New Jersey, and Maine that cut football programs because of the increasing cost and concerns over player safety as well as a declining number of athletes willing to participate in full-contact sports (Belson, 2015a).

As recently as December 2, 2014, a class-action lawsuit was filed against the Illinois High School Association, alleging it was negligent in caring for concussed

students (Toporek, 2014). This lawsuit is referred to as a first of its kind, and the author noted that the association had not adopted any concussion policy in the early 2000s, leading to inconsistent RTP decisions (Toporek, 2014). The lawsuit also alleged that the state’s concussion protocol fell short of best practices and should be amended.

Twenty-two states adopted initial concussion legislation from its original form, most revisions dealing with expanding coverage, clarifying existing requirements, or introducing efforts at primary prevention and early detection (Lowrey, 2015, p. 66). Since 2014, Nebraska and Virginia expanded concussion protocol legislation to include return to school or RTL components. Written in much the same style as the RTP protocols, this legislation calls for districts to ensure a student is evaluated and thoroughly assessed for an appropriate return to the classroom prior to returning to play on the field. It can be argued that RTL legislation may face the same obstacles noted by Lowrey and Morain (2014) in the implementation of RTP protocols, most likely being vagueness of enforcement responsibility, issues with noncompliance and a general lack of education of teachers and parents about the importance of RTL policies.

Leadership Literature

Educational leadership is guided by an “ethic of care” (Starratt, 2012, p.38). As school administrators increasingly feel the need to be accountable for their decision-making, educational leaders need to make informed decisions centered on students’ best interests (Stefkovich & Begley, 2007, p. 210). Concussion management is particularly relevant given the frequency of occurrence (Hotz et al., 2014, p. 3). School leaders are called to respond to this phenomenon in the same manner as would be applied to students with special needs (Frick et al., 2012). Many educators remain unaware of concussions’

implications for student learning (McAvoy, 2012). Additionally, school leaders have failed to provide professional development for faculty/staff to keep current with the issues students experience. Failure to provide these professional growth opportunities compromises an educational leader’s ability to be effective and work in the best interests of students (Frick et al., 2012, p. 211). Therefore, the study provides educational practitioners and those in leadership positions with a forum for professional development.

Best Interests Model

A conceptual model was designed to guide and inform this study (Figure 1). As a theoretical framework or lens, the best interests model was used to explore the ways leadership approaches decision-making. At the center is the system of concussion care management with consideration to the organizational structure needed to support it. Influencing the validity of this system is the best interests model and the need for school leadership to consider a system that best serves the student body with regards to rights, respect, and responsibility. Factors for school leadership to consider in relationship to the system are concussion education for the community, the human and fiscal capital necessary for the system to optimally function, and the legal issues surrounding concussion care management.

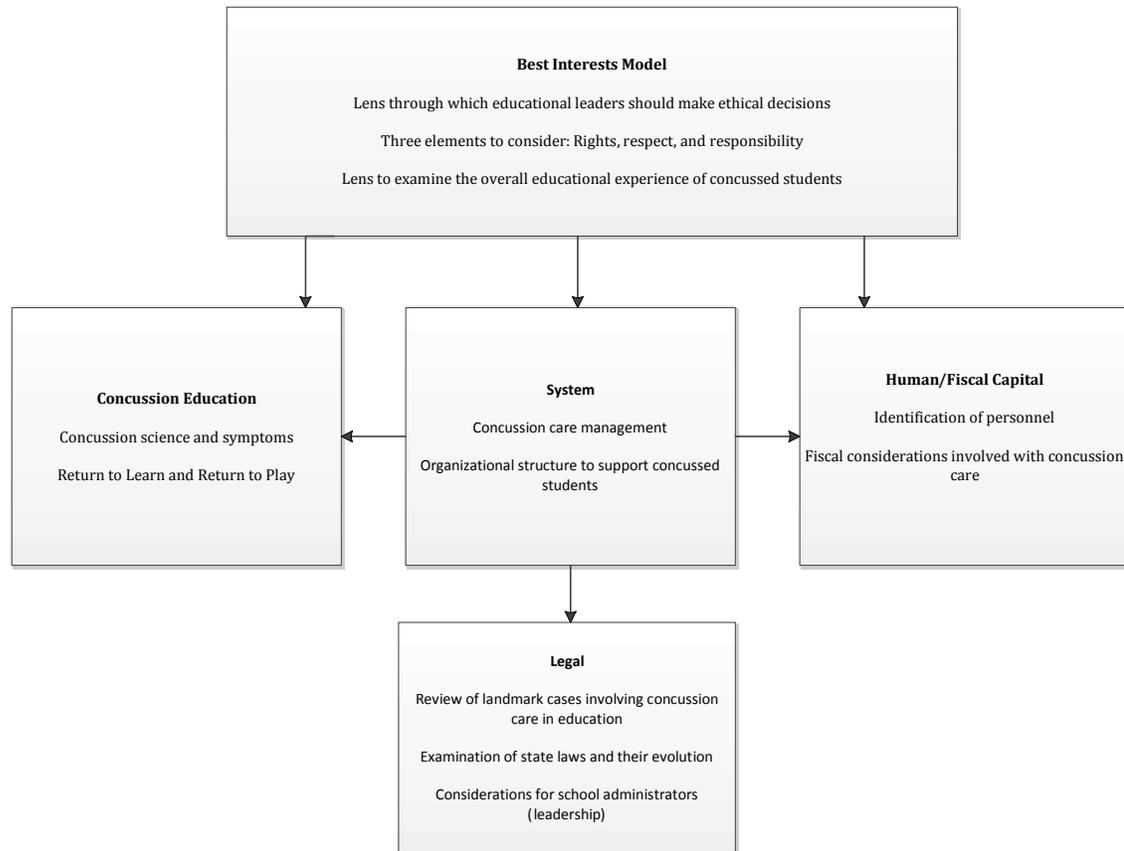


Figure 5. A theoretical representation as to the approach of this study

The best interests model evolves from the ethic of profession introduced by Shapiro and Stefkovich (2005). The ethic of profession acknowledges that tensions will exist within educational decision-making due to diverse ethical perspectives on children’s education. Also, professional codes utilized to arrive at decisions, the personal moral beliefs of the school leader, and community standards and expectations for professional practice fall under the same ethic (Frick et al., 2012, p. 211). Frick et al. refer to the convergence of these factors as the “clashing of codes” and suggest that a rubric such as the best interests model is needed to ensure a balanced approach to decision-making (p. 212).

The best interests model is an ethical paradigm that consists of three general areas: rights, responsibility, and respect. Rights are at the center of determining the best interests of a student. According to Stefkovich and Begley (2005), leaders must consider the following aspects of children’s rights: universal rights, education as a fundamental right, freedom from bodily harm, freedom from humiliation, dignity, and equality (p. 215).

Responsibility refers to the exercise of a right in a responsible manner. Students do have rights, but they are not without stipulations or boundaries. For example, the First Amendment guarantees free speech; however, a student is not permitted to bully or harass other students in a verbal manner (p. 218). Students have an obligation or duty of mutual responsibility to others for a common interest (Frick et al., 2012, p. 215). Further, responsibility is paramount when it comes to the decision-making practices of educational leaders. School administrators have an obligation to make “moral decisions based on issues of fairness and equality” (Stefkovich & Begley, 2007, p. 218).

For relationships to grow and trust to be established between students and school leaders, a mutual respect must exist. This phenomenon only takes place when school administrators make ethical decisions that reflect the needs of the students and are not self-serving (Frick et al., 2012, p. 215). Stefkovich and Begley (2005) suggested that school leaders consider the following themes with regards to respect: equality and equity, self-respect, tolerance, acceptance of frailties, appreciation and celebration of diversity, and a commitment to finding common ground (p. 216). The establishment of a comprehensive concussion care program represents a convergence of the best interests of the students and the moral decision-making of school leaders. An ethically sound

decision, which positively influences the students’ experience, demonstrates the ethic of care and fosters a commitment to fairness and equality.

Summary

A review of literature indicated five themes for this study of teacher’s impressions with regards to the implementation of a concussion management system and its impact on RTL practices: concussions and concussion management, protocols on RTP, protocols on RTL, legal aspects surrounding concussion management protocols, and a conceptual leadership model of support for concussed students. The theme of concussions and concussion management explored the components of existing concussion care protocols including the best practices of other institutions. Additionally, the detection and symptoms of concussions was discussed with relation to baseline testing. Lastly, this theme introduced the team approach to concussion management and suggestions were made as to which stakeholders should be included in the process.

The theme of RTP examined the facets that should be considered when allowing a concussed student to return to athletic involvement. A review of legislation regarding this theme helped to identify legal expectations regarding RTP. Also, this theme focused on the roles of the athletic trainer/medical professional and school administrators within a concussion care protocol.

A review of RTL exposed a gap in the literature as there is not nearly the amount of research available when compared to RTP. However, utilizing existing best practices, this section examined typical learning accommodations, challenges to implementation, benefits of implementation and the teacher’s role in RTL. Further, the role of school

administration was explored with consideration to communication, politics, culture, and the balancing of RTP and RTL.

The theme involving legal aspects of RTP and RTL provided a historical lens for the emergence of litigation regarding insufficient care for concussed students. This section included a review of legislation from various states as well as a nationwide perspective towards concussion care laws.

Finally, this literature review focused on leadership literature in relationship to concussion management. Particularly, this theme focused on the two leadership concepts, acting in the best interests of students and the ethic of care that school leaders should utilize as a lens.

CHAPTER THREE: METHODOLOGY

While much has been researched on RTP protocols within secondary school concussion management systems, few studies explored the ways students experience academic reintegration after sustaining a concussion. The health and safety of all students is of paramount concern for those in positions of educational leadership. At secondary schools, the responsibility of balancing the health and well-being of students engaged in the day-to-day activities of student life is that of the principals. In recent years, the issue of concussions emerged as a critical junction between what is legally required with what is ethically expected of school leaders. Unlike traditional injuries such as a broken leg or arm, concussions are not readily apparent. Symptoms include, but are not limited to, forgetting very fast or demonstrating short-term memory problems, weak and slow response to questions, and deprived level of consciousness (McAvoy, 2011).

This study sought to investigate teacher perceptions in response to the implementation of a concussion care protocol at one private high school. Using a qualitative case study design, the study explored the perceptions of teachers who had taught in the midst of one school’s adoption of a concussion management protocol. This protocol included both RTP and RTL components. The purposefully selected sample consisted of 23 participants (classroom teachers) with direct experience teaching concussed students in the classroom and carrying out the concussion management system. This chapter illustrates the methodology, procedural steps, data analysis, and coding schema for the emerging findings.

Research Questions

The purpose of this case study was to understand teachers’ perceptions of the implementation of a concussion management system and its impact on RTL practices at one Catholic secondary school. The aim of this case study was to provide teacher perceptions about an existing concussion care protocol implemented at the study site. The following questions guided the researcher in conducting the case study: (1) Where does RTL fit within a concussion care protocol? and (2) How can a concussion model be properly integrated in order to ensure effective implementation of RTL?

Method Rationale

There are various choices of research, depending on the intent of the study, and they include mono-method (either qualitative or quantitative), multi-methods and mixed-methods.

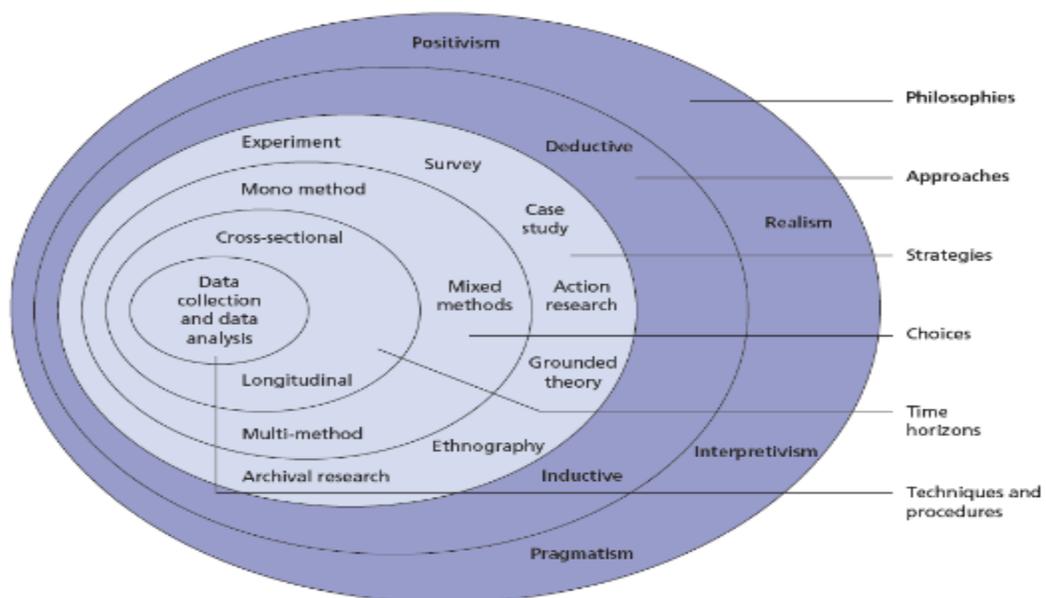


Figure 6. Study onion depicting a progression through research methodology (Saunders, Lewis, & Thornhill, 2009, p.138).

As demonstrated in Figure 6, the first layer of the “study onion” brings forth four distinct philosophies, namely positivism, realism, pragmatism, and interpretivism (Saunders et al., 2009). With regards to this study, it was clear that an approach employing interpretivism and realism was likely to be successful as the goal was to understand the lived experiences of the participants through interviews. Realism also considers the aspect of truth in the study. Further, novel research suggests that a realist approach to qualitative studies garners the ability to capture the entire picture when conducting a study on a particular phenomenon (Novikov & Novikov, 2013).

The social aspect that existed in the study of concussions introduces a philosophical approach and, hence, the choice for interpretivism which was necessitated in the analysis of situations. Saunders et al. (2009, p. 116) highlighted that a researcher necessitates a comprehension of parallelism that exists in the study of human based actions and, hence, the aspect of interpretivism. Insights acquired through an interpretivism point of study hold a heightened degree of validity due to the trustworthiness and honesty attached to the respondents.

Based on the idea that this study required data gathering from multiple sources for the sake of making inferences used in formulating the protocol, it was apparent that an inductive approach was the most appropriate. Thomas (2003) highlighted that inductive approaches are necessitated in the event an individual seeks to condense large amounts of data into a small summary. In addition, Thomas (2003) noted that inductive approaches seek to establish steady affiliations between the objectives and the findings as well as form a theoretical summary of the data. Based on the idea that inductive approaches work well with qualitative research, an inductive approach was employed to capture the data.

While most researchers opted to embrace the inductive approach, a look at the deductive approach seemed limiting to this kind of research where facts and insights were highly salient in the implementation of a protocol. Gessel (2007) conducted research regarding concussed high school students in the United States and, through the employment of an inductive approach, managed to infer that the existence of surveillance during sport can facilitate improved injury prevention and management. Marar, McIlvain, Fields, and Comstock (2012) also embraced an inductive approach to infer that there are variances in gender, the type of sport and the risk levels based on the position of the player. The use of an inductive approach continues and, hence, revealed the effectiveness of this approach within this study. Based on the fact that the researcher sought to formulate inferences not commonly considered by many scholars, a wide array of insights from the instructors within the institution was necessary.

A case study approach was used to examine the elements within concussion care management due to the increase in the number of students suffering from this type of injury. According to Creswell (2007), a case study is best utilized when there are finite boundaries to the sample site, such as the school campus chosen for this study. Additionally, Creswell stressed that, in order for this approach to be effective, the researcher needs to be familiar with the location and should be able to provide an accurate portrait with regards to context and setting. Stake (1995) recommended the instrumental or single case approach when the researcher is attempting to examine specific systems of behavior by engaging a limited group of subjects.

There are several strategies that can be embraced in a study, and they are indicated in the research onion starting from surveys, case studies, and experimental

strategies among others (Saunders et al., 2009). One of the core aspects to consider in the selection of the strategy is the fact that the strategy should manage to address the study intents as well as reference the study questions (Rodriguez, Ajjan, & Peterson, 2014, p. 88). The specificity of this study necessitated a case study approach to the Jesuit secondary school, and the qualitative approach reinforced the design of the case study.

Description of Research Site, Participants, and Existing RTL Policy

Description of Research Site

The research site was a large all-male Catholic secondary school in southern California. This site was selected primarily because of its creation and adoption of a concussion management system that utilized baseline testing for all students, not just those who participated in school-sponsored athletic events. The student body consisted of 1,250 students with 80% of those students involved in some athletic competition at school. As of spring 2015, over 50 students had suffered a concussion and had received special academic adjustments outlined by the school’s new concussion management system and its RTL protocol.

Description of Participants

Participants were purposefully selected because they were classroom teachers capable of speaking to the research questions about ways educators support concussed students through a return to learn management system (Creswell, 2007). This study focused on the lived experiences of teachers at Central Catholic High School with regards to the RTL protocol implementation process. Therefore, the participants were all teachers with direct experience teaching at least one concussed student at the school. Nineteen men and four women were ultimately interviewed for the study. It should be noted that

the disparity in gender is due to women comprising only 30% of the faculty. In the participant population, the years in education range from range from two to 42. The same is true for the years of service to the school. The subject areas taught by the participants include Mathematics, English, Foreign Language, Science, Social Science, and Fine Arts. Nine of the participants serve as athletic coaches in sports such as football, basketball, baseball, track, soccer, and golf. Eight of the teachers serve as moderators of clubs that include newspaper, drama, forensics, and yearbook. All teachers interviewed held full-time positions at the school.

The lack of personal identifiers from the data was salient in the storage process as well as in protection the participants’ identities. In light of ethical considerations, the transit of data to the transcriber and back was conducted digitally, and the transcriber did not disclose any data to outside parties.

Existing RTL Policy

In reaction to the growing numbers of concussions, Central Catholic High School implemented a concussion care protocol in 2015. This protocol adopted existing RTP procedures and focused intently on incorporating RTL processes into the recovery of all concussed students. The protocol was intended to serve as a guideline for teachers of concussed students as to how to adapt or modify curricular decisions. Upon the diagnosis of a concussion, the student was placed on Level 1, a restriction that called for no academic work to be done and mandated that the student stay home from school on complete brain rest. Next, Level 2 introduced the student back to school in an abbreviated fashion by allowing the student to attend a partial day with strategies for teachers to employ if the student displayed or complained of symptoms. This level also initiated a

progressive approach to RTL allowing for 10 minutes of homework with 30-minute interval breaks. Level 3 allowed the student to attend a full day of class and expanded homework allowance time to 20-minute periods with 30-minute interval breaks as long as the student was asymptomatic. Next, in Level 4 the student was permitted to take notes in class and could increase homework intervals to 30 minutes with 15-minute breaks as needed. At this level, the student could begin to incrementally make up missed assignments. It was the up to the teacher’s discretion whether the make-up work was necessary. Further, the teacher needed to consider that the recovering student was accountable to six other teachers also implementing that student’s RTL protocol. Finally, Level 5 removed all academic restrictions and allowed the student to complete all current and past work. In the case of a concussed athlete, RTP and RTL were executed concurrently. However, no student was allowed to complete the RTP process until they reached level 5 of the RTL protocol (basically reinforcing the notion that students needed to perform academically before they were permitted to participate athletically).

Instrumentation

This study consisted of a collection of interview questions, grounded in the literature, regarding concussion care management and leadership. These questions were used during a pilot interview with two qualified participants prior to commencing this study (Yin, 2003). Adjustments to the questions allowed for more open-ended responses and follow-up inquiries by the researcher. Once the final set of questions was established, the questions were approved by the dissertation committee. Following is the list of questions utilized during each of the interviews:

1. How long have you been teaching? What grade levels do you teach?

2. How long have you been at this school site?
3. In addition to classroom instruction, are you involved in other aspects of school / student life?
4. What has been your experience with the concussion program? Baseline testing?
5. Share your main concerns regarding students returning to the classroom after a concussion.
6. How many students in your classes this school year have suffered a documented concussion?
7. What are your concerns about concussed students?
8. Describe how you became aware of the concussed student(s) in your class.
9. Explain your approach towards the concussed students given the information provided by the school. What might the process look like in your mind?
10. Tell me about any interactions you’ve had with leadership/athletic trainer or others about integrating a student back into the classroom after having sustained a concussion.
11. Describe any interactions you have had with parents regarding concussions.
12. Do you think the school is overreacting to the phenomenon of concussions? Is the school not doing enough to help concussed students?
13. Do you feel this program is in line with the school’s mission? Why?

The Researcher’s Role

Creswell (2007) described one’s positionality as the intersection between researcher and leader. As a secondary school administrator responsible for the administration of the school’s concussion management, researcher bias was present and

mitigated using the following approaches. First, regularly scheduled discussions took place between the researcher and a peer in order to receive feedback regarding the study. Second, a member outside of the dissertation committee served as an impartial voice to offer objective opinions about the approach to the study and its findings. This process served as an external audit. Finally, it was impossible for the researcher to separate himself from the research project as the value of a concussion care protocol was readily apparent to the researcher. To ensure that reasonable conclusions were drawn from the interviews, the researcher conducted member-checking, bracketing, and an audit by the committee. The methodology supported the pragmatic approach to the research however this cannot be completely validated, as there are several arguments that can be placed to counter the researcher’s choice of methodology.

Data Collection Procedures

Data were gathered through personal interviews as this was the optimal method to understand the work and experiences of the participants in this educational setting (Seidman, 2006). One-on-one, semi-structured interviews were conducted with study participants (Creswell, 2013). Topics addressed in the interviews included awareness of the existing concussion care protocol, experiences with concussed students, experiences with school leadership, and mission alignment. The interview structure allowed for each participant to respond in an open-ended fashion without any time restraints as suggested by Creswell (2013). Further, the setting for the interviews, a conference room within the study site, provided an intimate and quiet atmosphere, which was conducive to meaningful communication between the researcher and participants (Creswell, 2013).

The researcher received approval to study the research site from the site’s president and principal. A purposeful sample of 50 classroom teachers was selected based on their experiences teaching a concussed student. Zaza et al. (2016) supported the idea that participants who have any amount of experience with the interview content are better suited for research interviews. Of the 50 teachers, 23 were selected to participate in the study. Next, an email was sent inviting the participants to join the study (see Appendix A). Participants were asked to respond via email if they were interested in being a part of the study. Interviews were scheduled based on the teaching schedule of the participants and took place during a professional development period. Prior to each interview, a brief conversation took place in which the study’s purpose and parameters were detailed. A script was utilized to ensure consistency across all interviews; adjustments were made based on the conversations and the need for follow-up questioning (Creswell, 2013). The introduction to the recorded interviews included a guarantee of confidentiality as well as verbal consent by each participant (see Appendix B).

All participant interviews were conducted in person and digitally recorded via Rev.com. The recordings of each interview were estimated to last approximately 20 to 40 minutes, with handwritten notes taken during the interview to supplement discrepancies or clarifications in the audio.

The field research was conducted over the course of two months and included 23 interviews with participants who could speak to the research question. The interview protocol consisted of 13 prompts and contained topics related to the research question(s) (see Appendix B).

Leadership Roles/Implications as It Relates to Data Collection

This study was critically centered on understanding teacher perceptions about the implementation of a concussion management system, specifically focusing on RTL practices, at one Catholic secondary school setting. This input will help to inform the decision-making efforts of school leadership. As the lives of students remained at the center of this work and considering the best interests model and the ethic of care, the execution of this study carried with it a great deal of relevance for school leaders.

According to Sergiovanni (1992), the moral purpose of a leader is to develop the person.

The researcher developed a progressive appreciation for the implications of this study and the possibility that this work could inform a network-wide approach to concussion care management, as well as make meaningful contributions to the already impactful studies.

Data Analysis Plan

A data analysis plan was necessary in developing a systematic approach towards collecting and analyzing the data. The plan included the following key areas with a specific time frame to support the plan. Each of the 23 interview transcripts were read in their entirety one time through without categorizing or coding any of the information.

This process was done to become familiar with the information while not being influenced by the need to organize the data. The initial read-through allowed the researcher to discard some of the information as Wolcott (1994) recommended. Next, the researcher developed a code book and established prefigured codes to begin the analysis. However, the researcher remained open to the emergence of additional codes as Creswell (2013) suggested. Interviews were read again with the researcher manually highlighting key words and making notes in the margins of each interview transcript. Finally, the coding

process was repeated to accommodate for emerging codes that were developed in the later interviews.

Upon completion of transcript analysis, each of the codes, both prefigured and emergent, were categorized and supported by the quotes of various participants. Creswell (2013) stated that, to prepare data for analysis, one would need to categorize and place the insights in parallel sections based on the nature of participants. The initial categories included the following: adherence to the mission of the school, feelings towards the existing protocol, leadership, teacher education, safety of the students; team approach, communication, trust; faculty appreciation/endorsement, and the future. These categories were collapsed and organized into the following themes: institutional awareness: exploring the unknown; institutional action: taking steps towards RTP and RTL policies; and institutional reflection: pausing for evaluation. This classification system allowed the researcher to formulate the exemplars used to support the themes and illustrate the findings and interpretations of each section.

Ethical Considerations

University institutional review board approval was received before collecting and analyzing data. As the owner of the data, the researcher ensured all data were adequately safeguarded. The data were reviewed with the dissertation committee using the established codes to ensure and heighten participant and institutional protection. The data (transcribed interviews with participant codes [see Appendix B], the interviews, and the research journal) were maintained in a locked file for the duration of the study. Upon completion of the study, all audio recordings were deleted and hard copy materials that could help to identify the participants were shredded.

Allmark (2009) warned against the temptation to direct the study towards the agenda of the researcher, and, hence, the researcher ensured all questions directed to the participants were non-suggestive and open-ended. Additionally, all follow-up questions were formed based on the participants’ responses and experience, not the researcher’s assumptions or perceptions. The interview protocol was piloted to alleviate potential biases. Allmark (2009) suggested the swaying of participants’ responses is unethical, and, hence, the freedom of speaking out is referenced as a steady consideration in terms of participants’ rights. In addition to all these, the study’s authenticity and accuracy relied on the researcher’s compliance with ethical aspects.

Assumptions, Validity, and Transferability

Assumptions

A few underlying assumptions were identified within this study. Bryant (2004) suggested that “in order to generalize one’s findings from this sample to a larger population, one must make assumptions about both the representatives of the sample and about the stability of findings gathered at one point in time” (p. 56). The following were assumptions made by the researcher:

1. The researcher assumed that all participants were supportive of the school’s mission to provide personal care for each student.
2. It was assumed that all participants had, at the very least, a fundamental knowledge of the causes and effects of a concussion.
3. The researcher assumed that all participants were truthful in their responses to the interview questions.

4. It was assumed that teachers intended to utilize best practices within their classroom teaching.

Limitations

A fundamental limitation encountered early in this study was the lack of time-tested literature on concussion management protocols/systems with regards to RTL. An additional limitation of this study was that students were not interviewed to assess their perceptions about concussion care, nor was there any measure of the effectiveness of the RTL process on the physical healing of the student. The study only included the perceptions of classroom teachers who were responsible for implementing parts of a RTL plan with at least one student at some point in time after the implementation of the RTL protocol. Finally, this study considered the setting of only one school with data collection taking place at one Jesuit secondary school.

Delimitations

This study, while it utilized some literature on athletics, was not solely about concussions suffered by students at athletic events. In this way, the reader should not enter with a presupposition that this is only or all about athletics. It is important to note that the school involved in this study baseline tested every student, not just the athletes of specific teams. While the school did have a form of concussion management protocol, the school did not have a holistic baseline approach, and, thus, the study may have different information available that was not part of this study.

Transferability

Transferability references the ability of the inferences to be placed on a general scale or the extent to which these results can be incorporated into other affiliate studies

according to Sinkovics, Penz, and Ghauri (2008). The transferability levels of the results were considered high based on the idea that the insights dispensed by individuals could fit in several studies on concussions in high schools as well as in other studies on concussions. For instance, the inferences on how soon students resume studies while recovering from concussions can be used in the determination of the levels of importance institutions hold towards medical safety. Also, insights on the awareness of leaders/school instructors towards handling concussions can be used in studies directed at realizing the efforts of sports programs in increasing awareness.

Summary

This chapter described the methodology utilized to best understand the perceptions of teachers regarding the implementation of a concussion care protocol, which included RTL. A case study approach was utilized to capture the real-life experiences of teachers who taught at least one concussed student subsequent to the implementation of the research site’s implementation of a concussion care protocol plan. An interview protocol was followed with questions stemming from the literature and the researcher’s leadership experience. The interview protocol was piloted and refined to ensure precision to the interviews and the collection of relevant data. Finally, data collection and data analysis plans, along with ethical considerations and insurances of validation were detailed and described.

CHAPTER FOUR: FINDINGS

Student concussions are a concern for all leaders in secondary school settings. This chapter illustrates the themes that emerged from this dissertation study. The themes are outlined in three sections. The first theme that emerged from the data, Institutional Awareness: Exploring the Unknown, centered on teachers’ perceptions about the RTL protocol, the mission of the school, the pre-concussion management protocol, and the ways leadership approached the development of a more sustained and focused concussion management protocol. The second theme, Institutional Action: Taking Steps Towards RTP and RTL Policies, encompassed perceived teacher concerns about student safety, developing a team approach to concussion care, and fostering communication and transparency in the school setting. The final theme, Institutional Reflection: Pausing for Evaluation, included teacher perceptions of teacher education, the cultivated trust among faculty over RTL, and faculty appreciation and endorsement.

Purpose of the Study

The purpose of this case study was to understand teacher perceptions regarding the implementation of a concussion management system including RTL, for teachers at one Catholic secondary school.

Aim of the Study

The aim of this case study was to provide teacher perceptions to school leadership about an existing concussion care protocol, specifically the RTL practices, recently implemented at the school.

Review of Methodology

The field research was conducted over the course of two months and included 23 interviews with participants who had personal experience and could speak to the research question. A research-designed interview protocol with approximately 13 prompts consisting of topics related to the research question(s) was administered to the participants (Appendix B). Data were gathered through personal interviews to understand the work and experiences of the participants in this educational setting (Seidman, 2006). One-on-one, semi-structured interviews were conducted with study participants using a research-designed interview protocol (Appendix B), as described by Creswell (2013).

Areas addressed in the interviews included awareness of the existing concussion care protocol including RTL practices, experiences with concussed students, experiences with school leadership, and mission alignment. All participant interviews were conducted in person and digitally recorded via Rev.com with handwritten notes completed during the interview to supplement discrepancies or clarifications in the audio. Further, the setting for the interviews, the counseling conference room, provided an intimate and quiet atmosphere, which was conducive to meaningful communication between the interviewer and the interviewees (Creswell, 2013).

The researcher was granted permission to access the school site from the school’s president and principal. A purposeful sample, comprised of 50 teachers, was selected based on their experiences having taught a concussed student under the recently implemented RTL protocol. Zaza et al. (2016) supported the idea that participants who have any amount of experience with the interview content are better suited for research interviews. Of the 50 teachers, 23 were requested participate in the study. Next, an email

was sent inviting the participants to take part in the study (see Appendix A). Participants were asked to respond to the researcher via email if they were interested in being a part of the study. Interviews were scheduled based on the teaching schedules of the participants and were conducted during a professional development period. Prior to each interview, a brief conversation took place in order to establish the context of the study. A script (see Appendix B) was utilized to ensure consistency across all interviews; however, modifications were made based on the conversations and the need for follow-up questioning (Creswell, 2013). The introduction to the recorded interviews included a guarantee of privacy as well as a verbal consent by each participant (see Appendix B).

Data Analysis Procedures

A data analysis plan is necessary in developing a systematic approach towards collecting and analyzing data. The plan included several key areas with a specific time frame to support the process. Each of the 23 interviews were read in their entirety one time without categorizing or coding any of the information. This process was done to become familiar with the information while not being influenced by the need to organize the data. The initial read-through allowed the researcher to discard some of the information as Wolcott (1994) recommends. Next, the researcher developed a codebook and established prefigured codes to begin the analysis. However, the researcher remained open to the emergence of additional codes as Creswell (2013) suggests. Interviews were read again with the researcher manually highlighting key words and making notes in the margins of each interview transcript. Finally, the coding process was repeated to accommodate for emerging codes developed in the later interviews.

Upon completion of transcript analysis, each of the codes, both prefigured and emergent, were categorized and supported by the exemplars of various participants. Creswell (2013) stated that, to prepare data for analysis, one would need to categorize and place the insights in parallel sections based on the nature of participants. The initial categories included the following: adherence to the mission of the school, feelings towards the existing protocol, leadership, teacher education, safety of the students, team approach, communication, trust, faculty appreciation/endorsement, and the future. These categories were then collapsed and organized into the following themes: institutional awareness: exploring the unknown; institutional action, taking steps towards RTP and RTL policies; and institutional reflection: pausing for evaluation. This classification system allowed the researcher to formulate the exemplars that were used to support the themes and illustrate the findings and interpretations of each section.

For confidential and effective analysis of data, the 23 participants are referred to as R1 through R23. These assigned codes represent teachers who also served in varied roles such as coaches, moderators, and technical support staff. Further, these teachers had experience teaching concussed students after the recent implementation of the school’s concussion care protocol.

Research Questions

The following questions guided the researcher in the synthesizing of the data collected:

1. Where does RTL fit within a concussion care protocol?
2. How can a concussion model be properly integrated in order to ensure effective implementation of RTL?

Results

Concussions present a significant health impact for students. While most concussions occur as a result of athletic events, others occur outside of the athletic arena. Once a concussion is diagnosed, the transition to the classroom may take quite some time as the swelling in the brain begins to subside. With this medical condition, a RTL protocol is necessary to support a student’s transition to the classroom in order to support brain healing and academic progress. This study sought to explore and understand teacher perceptions regarding one school’s implementation of a concussion management system, including RTL processes. The findings, illustrated in the headings, identify the key themes that emerged from the study and represent some of the organization’s experience with concussion management under a new, experimental plan.

Theme I: Institutional Awareness: Exploring the Unknown

“I don’t know that I didn’t handle the kid right. I just didn’t know what to do. You weren’t given specific guidelines on what you should be doing. If a student had a concussion, he’s out of school, and, when they were back, you assumed he was ready to go.” (R2)

Administrators are tasked with engaging in a form of institutional awareness by taking part in a daily environmental scan of many school activities that have an impact on a young person’s life. For the study site, concussions management was an entirely new field of exploration outside of what was already expected for student-athletes. Until the implementation of the new plan, little attention was paid to non-student-athletes who reported to school with concussion symptoms. Participants interviewed, such as R2, consistently communicated not knowing exactly who had a concussion and what was

expected of the classroom teacher. The story of the study site is not a new one; much of what can be understood from its story will be outlined in its experience with concussions and establishment of its concussion management protocol.

Prior to the establishment of the concussion care protocol. Unaware of concussions and the ways to provide sufficient RTL support, teachers at the study site permitted students to reenter and engage with the classroom activities without proper learning adjustments. There was no written plan or process for teachers to follow. The new policy, however, provided clear guidance for teachers. According to one participant, prior to the implementation of the RTL protocol, he could not recall a time in his 42 years teaching at the school that he ever received information on how to proceed with assisting a concussed student. He stated, “[u]p until this new program was created and we found out scientifically some really important information about concussions, I can’t remember a time when I was every informed of a concussion of a student” (R20). Reflecting on their pre-concussion care protocol experiences, participants were simply unaware of any concussion physical signs or symptoms. One participant reported,

The only way that I would know about it is from a parent lobbying for his son. Because [site study] is a really rigorous place, I think the parents were concerned that the injury would lead to a lot of make-up work and a lot of added stress on the student, so the parent would typically send the email off and, “Hey, look this is what my kid is going through. Can you give him a little bit of space on a couple of these assignments until he gets better?” What I can remember distinctly is that it was from parents. Parents would lobby for their sons. (R13)

Other participants expressed concern over how they had handled concussed students in the past. Without a standardized approach to concussion care, the teachers were left to arbitrate the situation on their own. One participant said,

I really just thought it was something I couldn't confirm, and so I, rather than fight it, I'd give the kid the extra day. I don't think I've ever had anybody who had either missed class because of a concussion. I certainly never got any kind of directions about return to school. It really makes me second guess the choices I made. I really didn't know that much about how we should care for concussions. It's only been getting these emails from the athletic trainer that I've even realized that it's hard for some kids to be in a room with fluorescent lights after they've had a concussion. It's hard for them to be sitting still and listening, trying to be attentive. (R14)

Participants were asked to reflect on their experiences with concussed students under the new RTL protocol as opposed to prior academic years when the school had no established RTL practices. All participants acknowledged their insecurities with regards to concussions and RTL and expressed appreciation for the guidance they have received under the recently developed protocol.

I think it's a dramatic difference between the past and the present. If I came in a year ago, before this program, I would sit here and you ask me how many concussed students have I had, I would say, "Maybe one. I don't know." Now, I can say definitely, "I've had six. They've been diagnosed. They had protocols." You at least know who's got it because it's more pervasive than...concussions are more pervasive than they are made out to be. (R4)

While all participants expressed a deep sense of concern over the well-being of a concussed student, the inability to provide them clear assistance was evident. In essence, a lack of awareness on the part of school leadership created a void in the area of RTL within the existing concussion management system.

In 2014, school leadership reviewed best practices for how to deal with students who sustained a concussion. Central to the discussion was the AT whose primary responsibility was to oversee the physical well-being of all athletes in the school’s 13 Division I sports teams. Further investigation by the school’s administration found that there was a disparity in the numbers of students who had sustained a concussion, finding that more students suffered concussions doing things outside of school activities than just those playing school-sponsored sports.

The AT had 28 documented concussed students while the assistant principal for curriculum had dealt with 16 cases separate from those reported by the ATs. Therefore, the school faced over 40 concussed students. These cases only surfaced to the attention of the assistant principal when students brought a note from their physician as part of the school’s policy on absenteeism. Additionally, these same students who sustained concussions in non-school-related activities lacked an academic support system and were not tracked as they recovered. In general, teachers were made aware of a student’s doctor’s recommendations via e-mail with a general description of how to support the student. Some of these recommendations included reduced work load, assigning no tests or quizzes, keeping the student’s desk clear of all materials, and allowing the student to put his or her head down on the desk if necessary. It was unclear to the teachers whether they were bound to adhere to the physician notes and/or the extent to which academic

modifications were necessary or mandatory. No direct communication took place between a teacher and a physician in regards to student progress within the classroom.

According to the AT, “the biggest problem discovered was that teachers really had no direction when trying to handle a student with a concussion” (personal communication, 2014). The recommendation from medical personnel for teachers to reduce workload was a major discussion point. What does it mean to reduce a student’s workload in American Literature? What about Chemistry? Who decides what reduced workload looks like and how long does a student need a reduced workload? When there was no concussion follow-up between the AT and the teachers about tests or quizzes, some teachers only asked about possible academic adjustment after the student had returned to play and/or the student’s progress began to decline. Then, it became an issue of a student having to handle a heavier than average workload to make up for the time missed during the concussion recovery. The other issue was that students who were not injured through athletics were basically telling each of their teachers, “I have a concussion, and I can’t do these assignments” without a formal process followed by the school. Once again, it became evident that this was a larger problem than anyone thought and needed to be addressed immediately by all members of school leadership and not individual teachers or students.

Leadership awareness. In partnership with the school’s athletic trainer, the leadership at the study site chose to expand the concussion care management protocol to cover all students (athletes and non-student-athletes) whenever a concussion occurred on or off campus. Therefore, the decision to baseline test all students and develop a school-

wide concussion policy implemented in 2014. The approach to include all students was supported by all study participants with one participant stating:

We don't just ignore them, and we don't only pay attention to the kids who are athletes. We don't just pay attention to the kids who get straight As. Since we implemented the program for every student, at first blush it was like, “Really? Why?” Then, as it just becomes the norm, then you realize that that's a way of paying attention to every single student from bottom to top or whatever, however you want to categorize them. I think that it fits right in. It's good. (R7)

While the state in which the study site sits maintains a RTP law, implementation by this school could be more conservative and comprehensive in approach due to the financial means and community partnerships maintained by the school. The study site required all students to have concussion baseline test results on file with the head athletic trainer before each academic year. Additionally, the study site partnered with concussion care doctors to ensure expert opinions when implementing this approach. One participant expressed the following statement with regards to the administration's approach to this issue:

Doctors tell students, but I think that it's cool that the school enacts policies and has a place for that. I think it's smart, and I think it's expected, so, anything less, I think it is harmful and detrimental to students' well-being, mental capacity and overall learning because that's my issue. At the end of the day, this is a learning institution. Things happen out of the classroom, but I like that we're still focusing on the learning aspect of the school. We're trying to make this kid feel comfortable in the school, in the classroom, and at home doing homework. (R12)

Appendix C illustrates the study site’s protocol. This plan includes partnerships with local medical providers, a new type of insurance coverage, computerized testing to gather baseline scores for all students, and an intensive communication plan for concussion management and academic modifications during the concussion recovery period. Participant R3 expressed further support from teachers regarding the process of integrating this concussion care management system by the administration:

I would say just when it was rolled out was almost perfect. It was what I would want from administration, from you guys that were heading it off. You told us exactly what you were going to do, you did it, and you kept us informed...which you never get at an education facility usually.

Finally, 15 of the participants included sentiments of pride in the school administration’s decision to not only address the issue of concussion care but to attempt to become the gold standard for other schools.

Well, as I said, I think there’s just so many different pieces of our mission. I think one of the things that...we want our students to be leaders. I feel like [study site] has been a leader in this. We’ve heard through different announcements from the administration, and, certainly, I’ve heard from you and from the athletic trainer, you guys are being asked to speak at conferences, you are being quoted....I think there was even something in an NFL document where [study site] is a leader in this. I think we’re modeling really well. If we want our students to be leaders, we ourselves need to be leaders. I think being at the forefront and leading in this, I think, this is going to be natural for other schools. (R5)

Advancing the mission of the school. While the establishment of RTL protocols was universally well received by the participants, it is incumbent on school leaders to ensure that any new school policy or program be consistent with the ideals held by all at the institution. Participants were asked to comment on the alignment between the concussion management system and the school’s mission statement.

Well, if we look at it, there are two areas that stand out to me: developing as a leader, which I think [we are] doing by being the first school to pilot this and carry it out to test all students’ baseline, and then the other part of everything, hoping to grow. We can’t only challenge our students to be open to new ideas and new ways of thinking of things. The adults have to do it, too. This is the current research that’s telling us this is a proper way to deal with concussions and bring our students slowly back in the mix, then our teachers are training staff, our coaches all need to be open to growth. (R2)

Within the responses to the area of mission alignment, all participants referenced the significance of baseline testing for all students, not just the athletes. The ethic of care and issues of equity were consistently mentioned when addressing this area. One participant stated,

You never know what individual circumstances are going to come up with our kids, so it’s a way to really take care of each individual student no matter what situation they might be in related to any kind of head injury, and I think most would say, “Yeah, we should definitely be doing it for athletics,” but to include all of our students it shows that we care about all of our students, and I think that

ties in well with our mission of really taking care of that individual student whatever those needs might be. I think it’s a great thing that we’re doing. (R8)

Participant 10 spoke directly to the impact on the entire student body and the message that this holistic approach sent to the school community:

This isn’t just a protocol for the athletes, or just the football players, or just the lacrosse players. This is for everyone. It sends a message to the student body and the parents and even the faculty and staff members that this school would have a mission to care for all students, and the safety of every student is important, even if they are just a band member, or just a straight A student, and they have no relationship to sports. Just in case they do come down with a concussion in some way, form, or fashion, there is support for them. I think that’s a great demonstration of caring personnel and caring for the whole person and the entire student body. (R10)

The school’s attempt to balance RTP and RTL—that is, attempting to address both the medical and academic needs of high school students who suffer from concussions was recognized by R22. Further, the school’s mission to educate the whole person was recognized as the lens for implementing this concussion management system.

I’m really impressed by it and I think the fact this return to learn and return to play is...when it’s been shared with us or discussed with us that they are both given the same value, and I think, with Central Catholic’s, mission to really educate the whole person, this is the same thing. You’re educating and caring for a whole person. You’re not just trying to get an athlete back on the field so that he can play gain, and you’re also not just trying to get the student back in the

classroom so the teacher doesn't have to plan different plans. I think it's really about making sure that the student is fully aware of the importance of taking care of themselves. (R22)

Theme 2: Institutional Action: Teachers' Perceptions Regarding Implementation of RTP and RTL Policies

“Lord, I wish we had the data to know what damage we might have done in kids who just chose to keep on going. I wonder if they're suffering long-term consequences from that initial concussion. I don't know of any anecdotes even of that.” (R18)

Concerns over student safety. The implementation of a comprehensive concussion care program embodies a convergence of the best interests of the students and the moral decision-making of school leaders. An ethically sound decision, which positively influences the students' experience, demonstrates care and recognizes the importance of student safety. When participants were asked whether they felt the school was overreacting by establishing such an inclusive system, 19 responded by referencing student safety as the reason for their acceptance of the school's approach to concussions. Participant R4 stated, “It's his physical well-being first and foremost. It's no different than any of the sort of safety measures we put ... you know, the campus security, the fences around the ... I mean, no different than that.”

Participant R1 recognized the physical safety aspect of concussion care but did not seem to place as much of an emphasis on the RTL component:

That's a tough question. To be concerned about a student's safety is very important, but I tend to think more in the realm of physical safety—the damage to the brain. The physical damage that could happen by getting them involved in the

sport too soon. In the classroom, I’ve been teaching a long time, and I’m sure I’ve had kids with concussions in the past and they got through it. Once again, there’s no documentation for that, but they appeared to keep up with their work. It just seems now that it gives the kids a chance to recover physically, but I think that they are still able to keep up with their work.

In contrast to R1’s comments, R2’s comments suggested an appreciation for the research-based, balanced approach that the concussion care system represents:

Is he healthy enough to be in school? I think the days of just... You’ve got your bell rung, continue on, are over. It’s not healthy. It’s not realistic. I think we’re much more educated and we’re much more advanced in terms of how to help students make their way back into school. Once they’re back into school, what are they able to do? Just because they’re released to be in school doesn’t mean they can take on a full load. I think that’s probably the biggest thing that we’re becoming better at understanding what the students are capable of handling.

Finally, participant R14 presented the idea that a concussion care management system should be an expectation of the school community as part of their well-being in the community:

I think it’s hugely important. I think it’s part of our overall concern for the boys’ well-being and health the same way we have concerns about them getting enough sleep at night and getting proper nutrition and taking care of their bodies. This is another part of that. This is also a part of their lives where, I think, we have to be the responsible adults because they tend to throw themselves back into things, you know, thinking that there’s nothing wrong.

Developing a team approach. After conducting thorough research, school’s leaders arrived at the following for the make-up of the concussion management team: head AT, physician, parents/guardians, principal, assistant principal for student life, dean of men, school counselor, and teachers. These teams must determine the guidelines for a student-athlete’s return to the academic environment. There are several adjustments that must be considered, including rest periods during the school day, the extension of assignment deadlines, postponement or staggering of tests, extended test time, adjustments for oversensitivity to light and noise, and exemptions from team practices and gym activities. Regarding the establishment of the school’s concussion management team, participant R15 commented,

I think it looks like a coordinated effort between coaches, teachers and administrators to identify a kid that has a concussion, and to communicate that information on a need to know basis to those that work closely with the student. Typically, it’s his teachers and his coaches.

Additionally, participant R17 expressed support for the holistic, team approach to concussion care at the school site:

Yeah, no, I think the program is just in line with what it should be. I mean there needs to be identification. There needs to be everybody involved with it, whether being....It’s a nice conduit between athletics and academics. Making sure the counselors know, but between the....Let a trainer knowing, someone in administration knowing, their counselor knowing, and their teachers knowing. Also, being able to work the parents into it too. I think it’s fine for what it is. I think we....It’s really up to the teachers to work with the students and figure out

what’s going to be the most comfortable for the kid. No, I think the program is great. (R17)

Within the concussion care protocol, the AT will inform all members of the team with regards to appropriate rest from athletics (if applicable) and academic activities until the athlete has recovered fully from the injury. A note from the physician must be turned in to the AT and after every visit when academic adjustments are made. To comply with state law, any athlete must be seen by a concussion specialist when there is a suspected head injury. A note from a physician for every visit needs to be turned into the AT. All students with concussions must check in with the head AT at least once a day until the student has recovered from injury. All participants supported this approach with participant R6 stating,

It’s not just about get-well cards and all this kind of stuff. We have to do some necessary steps to make sure they stay on track academically, but, at the same time, how can we care for them and nurture that student when there’s some kind of disruption? If we’re asking them to be so many different things, these things happen, and these kinds of injuries exist. I love the fact that we can communicate with one another about a student and really try to help and put as many hands on that student to help them be successful here at Central Catholic. I think that aligns directly with our mission, and mission of the Jesuits, and I think the students go on with a serious appreciation for the school when those things happen.

Further, participant R17 recognized the need for the school to treat a concussed student in the same fashion that had been in place for those students whose injuries were visible:

I think there are a lot of schools that just don't really accommodate that as much as you can. It's much different than just accommodating for a kid who broke his leg. There's a lot of follow-up and logistics to beyond just figuring out how the kid gets around school. I mean it's tough. It takes a process to work with all the teachers, and making sure that we're accommodating for those kids who are suffering head injuries.

Once a student has been cleared to return to full activity without restrictions, all academic adjustments will be removed and the student will resume his normal academic load before the injury. At no time should an athlete be allowed to return to play and still have academic adjustments or accommodations.

In a follow-up question, participants were asked if they felt threatened or insulted by having an AT prescribe the workload for concussed students in their classroom.

Participant R10 stated,

I trust that the athletic trainer is telling me to implement these restrictions based on a biological, physiological standpoint of the brain and how it works....I'm okay with it. I don't think it's any major to do because the restrictions aren't so heavy that they completely disrupt the learning process. As a teacher, you know how to adapt, and the restrictions aren't that heavy.

All participants expressed, at minimum, a fundamental satisfaction with the team approach. However, participant R22 commented on his/her overwhelming support for the school's approach:

I actually appreciate it because it becomes a collaborative effort to just get this student back to where he needs to be in order to adjust in and out of the

classroom. I really like it, and I don't feel that any of the suggestions have ever sort of encroached or insulted what I'm doing with the students. Like I said, if it were just a note, “Hey, lighten up the load for this kid while he's under doctor's orders,” that would be more frustrating because, “Well, what does that mean? I mean does that mean something different from that, or does it mean something different for reading? Does it mean...what is the kid capable of doing?” I like it.

Additionally, in reaction to the AT's involvement with classroom activities, R22 went on to say,

I have yet to feel that somebody was stepping out of their boundaries or crossing any lines. I think it makes me happy knowing that this kid is getting covered by every aspect necessary. That it's not just a sports thing or an athletic thing.

Fostering communication and transparency. An effective concussion care management system needs to consider the implications for a student returning to the classroom as well as an efficient communication system from school leadership to inform teachers of prognosis and expectations. Participant R5 spoke to his/her experience with the school's approach to communication regarding concussions:

In each case, I got the notification as soon as the incident occurred, before the student ever was missing from my class. I knew it before I walked into the classroom to take attendance, the day after the concussion, that the student would not be in class, that the student had received a concussion and that these were the protocols. I thought it was clear what my expectations as a teacher were going to be from this student, and when I could expect homework from him, when I could give him tests, etc., when he was fully cleared to go.

There are various ways of communicating a student’s state through channels such as emails, phone calls or even in person, each with its strengths and limitations. It should be ensured that the entire staff understands how to communicate properly when allowed to take part in the plan. The study site’s staff chose emailing as the means for the AT and teachers to effectively communicate. All participants agreed that this approach to communication was effective as evidenced by the comments of participant R22:

The specific skill set, I guess, that was identified in the email, was really helpful because it allowed me to adjust. Then, the follow-up; after a day or two, you get that follow-up email saying, “Yes, the student is still under doctor’s care,” going to need at least a week to get clearance or maybe not cleared. I think the continual communication from the trainer was helpful, well more than helpful. It was quite significant.

Participant R22 went on to comment on the usefulness of the emails not only in terms good communication, but also for archiving purposes in order to track the missing assignments of a concussed student:

It’s been really helpful to have the documentations through the emails because I can easily pull it up and refer to when I need to, especially when it comes to tracking the students’ work that semester to progress that needs to be made depending on what he is able to return. I think, overall, it’s been...I feel that it’s been just really good with communication in the school.

Most participants expressed gratitude for no longer having to arbitrate whether a student was telling the truth about being concussed. The communication system in place seemed to give them confidence in moving forward with a concussed student as

supported by the comments of participant R5:

We now know for sure. If it is a concussion, one person will communicate with us, and that person will tell us our restrictions, tell us the student’s restrictions, and tell us when those are lifted. I feel like it’s a great model for other information that we maybe could get. I think it could be extended further, but I think this is a great tool for us.

Theme 3: The Necessity for Institutional Reflection: Teachers’ Perceptions About the Need for Ongoing Evaluation

“I feel very confident that I’m getting accurate information about the student’s ability to perform or not in my classroom, and so I want to give them the time they need to recover and do what I can to help them as they’re transitioning in the process.” (R8)

Teacher education. In many cases, school leaders failed to provide professional development for faculty/staff to keep current with the issues that concussed students experience. When implementing this concussion management system, the study site’s leaders were intentional in educating teachers about concussion care. The AT held several in-service training sessions during professional learning communities’ meetings, a forum for faculty meetings that included presentations and question/answer sessions. This proactive approach helped to explain a RTL protocol that includes a graduated level of schoolwork to be introduced to a concussed student.

Well, like with anything we learn. From five years ago, I even was at a...“okay, you hurt your head. It wasn’t a big deal.” You know? At the same time, I took a kid, if I can notice he was struggling, I would accommodate him. That’s not a problem. From five years ago to now, the difference would be, I think, we’re all

more educated. It’s something that we know is a problem and we want to fix it, or head off having a more serious injury down the road. I don’t see there was a lack of knowledge....Lack of knowledge, but not a lack of wanting to help a student if he was hurt, if that makes sense. (R3)

A response by Participant R5 demonstrated not only support for the school’s effort, but also openness to learning as evidenced by his/her use of terminology:

I don’t think we’re overreacting to the hype, because I think we really do understand that it isn’t just a return to practice, but it’s a return to learn. I like using that phrase, and I like that [the study site] is using that. It gives me confidence in what we’re hearing from the AT on it, is we’re realizing that, physically, they might feel better, but their brain is not ready to absorb the material yet. It’s an injury. We wouldn’t expect a kid that broke his leg to be out practicing on the field, but we also wouldn’t expect a kid who broke his leg to take the cast off and walk around the school. He still needs his crutches, he still needs his cast, and, in that same way, the student needs time to recover.

Additionally, the school’s administration sought to alleviate any resistance that teacher’s might express by employing the professional development plan mentioned here. This can sometimes be difficult for teachers, as past experiences may have caused them to doubt the significance of an injury that is not visible. Doubt can arise when a teacher suspects the validity of the injury and feels the student might be faking the injury in order to avoid schoolwork. Participant R20 expressed his/her shift in outlook towards the school’s concussion care efforts:

Once I went through this program and I was informed about what the qualifications are of this, and how serious concussions are, which I think was very important in our in-services that the school conducted for us to inform us about the importance and the seriousness of this, there is absolutely no question of its importance and my reliance on the athletic trainer to do that. But it did take an in-service and some training in order to get over that initial reaction.

Concussed students find comfort in knowing that those around them understand their situation and are knowledgeable on what they are feeling. Concussed students need to be reassured by their teachers that they will not be penalized for overdue work. The student needs to hear a constant and consistent message of support from all members of their concussion support team, which includes teachers.

Now that we have a lot of research and have seen what’s going on and know that these concussions can build upon each other and that there’s long-term health effects, it seems like, “We should have been doing more of this a long time ago.” When that student showed up before it was like, “Uh oh. Where are they at? What have they done? It was almost like maybe they’ve taken it too seriously.” Now, it seems like we’re being smarter and saying, “No, we need to take this seriously.”

(R19)

Participant R8 also expressed an appreciation for learning in order to best support the school’s concussed students:

I, personally, it gave me a sense of confidence that at least the student’s physical well-being was taken care of. I’m not one who knows much about the concussions or the physical health, so I found it very helpful to hear that information from the

athletic trainer just because he is the one who knows about the medical background of the students than I am, so it was helpful for me as a teacher to know.

Cultivated trust among faculty over RTL. For relationships to grow and trust to be established between teachers and school leaders, a mutual respect must exist. This phenomenon only takes place when school administrators make ethical decisions that reflect the needs of the students and are not self-serving. With regards to this concussion management system, teachers expressed an appreciation for the level of research utilized in its construction.

Personally, I trust the system that's in place, but we've done the research. It's been ongoing. Only because I've seen the changes in it. There's been some tweaks to it, and so when there's tweaks to a program, you have a tendency to trust it a little more. (R7)

Additionally, all participants referenced the expertise of the AT as well as the inclusion of medical doctors (concussion specialists) in the process as a factor in their support of the school's efforts:

Oh, yeah. I trust the athletic trainer's background and judgment and, a lot of times, you know, things are verified with a medical professional, so I feel very confident that I'm getting accurate information about the student's ability to perform or not in my classroom, and so I want to give them the time they need to recover and do what I can to help them as they're transitioning in the process. (R8)

Further confidence was conveyed by Participant R3:

There’s no emotion for me. I look at the athletic trainer as a professional. He knows what he’s doing. He is the one that I would look to for guidance in how to take care of this student. Being that I don’t have a medical background, I wouldn’t be expected to know what to do, so, for him to tell me, “He can only do 10 minutes of homework,” or, “He can’t take a test,” medically, there’s got to be a reason for it so I would err to him, or look to him, to tell me what to do.

By making short-term adjustments to a concussed student’s workload and schedule, teachers can help him or her return to academic normalcy in a manner that fosters trust:

One thing I feel supported by is the specificity of the limitations and when those limits are up because, when those limits are up, then that gives me permission again to now hold the student accountable and say, “Okay, you’ve been cleared. Let’s start talking about a schedule for when the assignments are going to come in, or when you’re going to make up tests.” For me to be able to say to a student, “I’ve received notice from the trainer, and he told me you’re cleared,” that’s the kind of support I need in that conversation with a student. (R14)

Faculty appreciation and endorsement. At the culmination of each interview, participants were asked to share their overall feelings about the school’s concussion management. All participants expressed a genuine appreciation for the establishment of the school’s concussion care system.

I think that the concussion protocol that we have here is probably among the best in the country, quite honestly. As a coach, I’ve thought about concussions and had to deal with them, but it’s only been recently that I was really made aware of the

impact that it has in the classroom. It’s helped me alter my philosophy in terms of really educating children. (R15)

Additionally, five participants spoke of their pride in the school for offering this level of support to all the students of the school. Participant R2 stated,

There’s no way for me to assess are we doing too much. Are we ahead of the curve in terms of addressing it and trying to find a proactive way to do it? Yes.

That’s the part that I’m most proud of.

Participant R4 added,

That’s why what [the study site’s] doing is so great. I don’t think it’s hype, I don’t think that in five years this will be all gone away, they’ll be something else. No, this is what happens when students bump their heads and play sports and horse around on campus, it happens. So, I think that it’s good that we’re doing something about it.

Participant R5 spoke to the appropriateness of resources allocated to this effort

Most schools can’t afford to do what we’ve done, and I think Central Catholic should be applauded for that. We’re putting our money where our mouth is, that we need this. We need to know what is happening with these students.

While expressing pride and adding support, Participant R2 also spoke to the future of this program:

I think we’re the first school to baseline test every student from what I understand, and that’s the way it should be. If it’s for the health of the student-athlete, the students in general, and for the knowledge base of our adults that are dealing with the students, and we should be able to help them. I don’t think we’re

doing too much. In terms of should we be doing more, as research continues to develop, I'm sure we're going to have to continue to do more training, more in-servicing....I think that way we can do more, just to continue educating. In terms of doing what we can do right now and trying to be ahead of the curve, yeah.

We're doing that.

Lastly, Participant R5 provided a synthesis of the school's overall approach to concussion care:

I feel, with the concussion, I'm told...I feel like with the emails, rather than being told, "This is how you have to manage your classroom," I really feel like it is giving me clear information on how I can best service this student and how I can best work with this student. I would feel really awful if I forced a kid to take a test and then found out later, hey, that was not okay because his brain is injured and needs time to heal. If a kid has a broken arm, I can clearly see it and I know that I have to give him extra time. With a brain injury, I can't see it. Clearly, when a kid sometimes returns and he still has headaches, you can see it on his face, but, for the most part, you can't tell. You don't know what's going on inside their head. Having someone tell me, "In my expert opinion, this student can now do this, this, and this, but still can't do this," is helpful. (R5)

Summary

This chapter interpreted and analyzed the data gathered during this dissertation in practice study. Each theme compiled teachers' perceptions about the concussion management system implemented at the study site. The researcher used individual interviewing as the method of data collection. Kothari (2005) acknowledged that this

technique of data collection is highly valued for its favorable feature of being flexible to the researcher and the participant as well as allowing exhaustive exploration of raw data from primary sources. In this chapter, the resulting themes were discussed through the qualitative approach, which facilitated critical analysis and helped to address the research questions. Three themes emerged during the scrutiny of the collected data that assisted in providing teachers’ perceptions regarding the research questions within this study. Nine codes emerged from the interview protocol: teachers’ prior experience with concussions, leadership awareness, advancing the mission of the school, concerns over student safety, developing a team approach, fostering communication and transparency, teacher education, cultivated trust among faculty over RTL, and faculty appreciation and endorsement. Those nine codes were collapsed into the following three themes: institutional awareness, institutional action, and institutional reflection.

CHAPTER FIVE: CONCLUSIONS, SUMMARY AND RECOMMENDATIONS

The health and safety of all students should be a priority for those in positions of educational leadership. At secondary schools, the leadership team must balance the health and well-being of students engaged in the day-to-day activities of student life. The issue of concussions emerged as a critical junction between what is legally required and what is ethically expected of school leaders. Unlike traditional injuries such as a broken leg or arm, concussions are not readily apparent. Symptoms include, but are not limited to, forgetting information quickly, demonstrating short-term memory problems, weak and slow response to questions, and/or a deprived level of consciousness (McAvoy, 2011). These symptoms pose significant challenges for students suffering from concussions and, as such, school leaders need to begin to formally manage a protocol to protect a student’s academic progress in the midst of a concussion.

Summary of the Study

The purpose of this case study was to collect teacher perceptions about the implementation of a concussion management system and its impact on RTL practices for teachers at one Catholic secondary school. The study was driven by the following research questions:

1. Where does RTL fit within a concussion care protocol?
2. How can a concussion model be properly integrated in order to ensure effective implementation of RTL?

The study employed a case study methodology. A qualitative case study design was useful in order to conduct in-depth interviews of teachers and their lived experience with the return to learn process. Data collection procedures included 23 interviews with

participants who were purposefully selected because of their engagement with concussed students. The data analyzed produced three key themes: institutional awareness: exploring the unknown; institutional action: taking steps towards RTP and RTL policies; and institutional reflection: pausing for evaluation. The aim of this case study was to provide teacher perceptions to school leadership about an existing concussion care protocol implemented at the school site.

Summary of the Findings

School policies are guided by informed decision-making processes that should seek to govern and protect all young people within educational settings. This study sought to explore and understand the case of one school’s experience with and adoption of a concussion management system (see Appendix C) that centered on the students’ holistic protection and support. According to Stepkovich and Begley (2007):

Understanding that adults possess a great deal of power in determining students’ best interests and realizing how easy it is to ignore the voices of those who literally have the most to lose, it is incumbent upon school leaders to make ethical decisions that truly reflect the needs of students and not their own adult self-interest. (p. 215)

The best interests model evolves from the ethic of profession introduced by Shapiro and Stefkovich (2005). The ethic of profession acknowledges that tensions will exist within educational decision-making due to diverse ethical perspectives on a student’s education. Also, professional codes utilized to arrive at decisions, the personal moral beliefs of the school leader, and community standards and expectations for professional practice fall under the same ethic (Frick et al., 2012, p. 211). Frick et al.

(2012), refer to the convergence of these factors as the “clashing of codes” and suggest that a guide such as the best interests model is needed to ensure a balanced approach to decision-making (p. 212). The best interests model is an ethical paradigm that consists of three general areas: rights, responsibility, and respect (Figure 7).

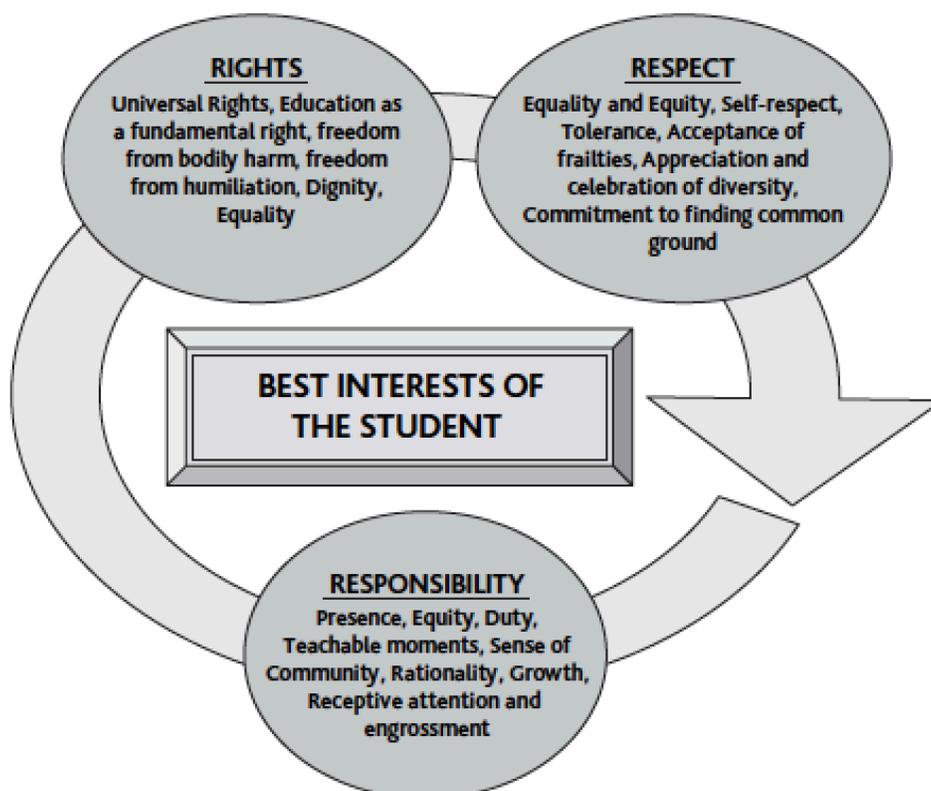


Figure 7. Best interests model (Stefkovich & Begley, 2007, p. 216)

As a lens, the best interests model provides an ethical framework to explore and understand the findings of this study. Throughout my career as a school administrator, this approach and model caused me to consider the impact of all decisions as they relate to the students. In this chapter, each theme of the current study is discussed in relation to one of the key themes within the best interests model (see Figure 7) to demonstrate the management of academic concussion care for students interrelates with the overall ethical responsibility of the school leader.

In the first theme of the model, Stefkovich and Begley (2007) discuss the rights of students: the right to an education and for the student to be free from bodily injury. The second theme, responsibility, addresses issues of equity, community, and growth. Finally, the third theme completes the circle by defining respect including topics of equality and tolerance among others. To illustrate and expand on the findings, each summary will be examined using this framework as the lens.

Institutional Awareness and the Rights of Students

Rights are at the center of determining a student’s best interests. According to Stefkovich and Begley (2005), leaders must consider the following aspects of children’s rights: universal rights, education as a fundamental right, freedom from bodily harm, freedom from humiliation, dignity, and equality (p. 215). At the core of a Jesuit education is the care for the whole person, termed *cura personalis* (Geger, 2014). This principle suggests individualized attention to the needs of the other, distinct respect for his or her unique circumstances and concerns, and an appropriate appreciation for his or her gifts and insights.

The first theme that emerged from this study illuminated the lack of awareness by the school’s faculty about the potential harms caused by concussions. Participants stated that they believed their own lack of knowledge contributed to a greater sense of harm for the student. One participant stated,

Lord. I wish we had the data to know what damage we might have done in kids who just chose to keep on going. I wonder if they’re suffering long-term consequences from that initial concussion. I don’t know of any anecdotes even of that. (R18)

Additionally, this theme addressed a student’s fundamental right to an education. As one participant stated,

I feel very confident that I’m getting accurate information about the student’s ability to perform or not in my classroom, and so I want to give them the time they need to recover and do what I can to help them as they’re transitioning in the process. (R8)

It was evident from the data collected that the participants in this study were concerned about the ability of concussed students to progress in the academic setting, yet felt a bit unaware of just how severe concussions consequences could be.

Aligning this theme with Stefkovich and Begley’s (2005) first component, school leadership in the case study had not completely considered a young person’s right to freedom from bodily harm in regards to their academic progress. Although many possible ways were created within the school’s policies to support all students, teachers remained unaware of the academic needs for students who had suffered a concussion. A glaring gap remained: What structure supports a concussed student in his/her return to learning?

Institutional Actions and Responsibilities Towards the Student

School leaders have a responsibility to ensure that decisions are made with the best interests of the students in mind. Stefkovich and Begley (2005) suggested that student rights are incomplete if they are considered without the associated responsibilities due to the students. Further, the authors asserted that “rights center on issues of equality and fairness, while responsibility emphasizes equity” (p. 218). The second theme of this study highlighted the perceived responsibility of the school to treat all students equally. Prior to the study, institutional action was necessary to address the gap in care for

concussed students, particularly with regards to RTL and, thus, a policy was implemented. Prior to the establishment of this concussion management system, only student-athletes were being baseline tested and provided with full RTP support but no additional RTL support if they suffered a concussion. However, a number of non-student-athletes were attending school after suffering a head injury and were left to navigate the RTL process with minimal institutional help.

The establishment of a holistic approach to concussion care included the baseline testing of all students and required all concussed students to be provided academic adjustments as part of the RTL process. This all-inclusive approach was achieved by tapping into the essence of the school as a community grounded in the principles of care for the whole person. As such, rather than focusing solely on student-athletes, all students were considered equally important under the newly implemented concussion care protocol. Teacher perceptions in this study demonstrated that this was viewed as a positive move towards building a community at the school.

This sense of community, a theme within the best interests model, is guided by a focus on responsibility. This focus is what guided the leadership, prior to the teacher perceptions collected for this study, to develop a team approach towards concussion care. As such, participants noted the importance of being responsible to all students, not just those who participate in school-sponsored events. Participant R14 stated, “I think we have to be the responsible adults because they [students] tend to throw themselves back into things, you know, thinking that there’s nothing wrong.” Additionally, the communication and transparency of the school’s approach demonstrated rationality and compassion towards addressing the problem and created teachable moments for both the

students and teachers. Participant R6 stated, “I love the fact that we can communicate with one another about a student and really try to help and put as many hands on that student to help them be successful here.” The actions taken by the school demonstrated an ethic of care for all students that was mirrored by participants’ responses.

Institutional Reflection and Respect

The Jesuit phrase for a distinct respect for a person’s unique concerns, mentioned earlier, is *cura personalis* (Geger, 2014). School leaders are called to demonstrate respect for students at all times. Prominent examples of this principle exist within common topics addressed by a school including cultural diversity, sexual orientation, and the simple appreciation for different gifts and talents. The best interests model utilizes descriptors such as equality and equity, tolerance, acceptance of frailties, and commitment to finding common ground in order to define respect (Stefkovich & Begley, 2007).

The third theme that emerged in this study suggested the need for the school to reflect on the concussion management system, consider its pros and cons, and to study its impact on the entire school community. Participants in the study provided several suggestions for improvement, many of which involved how the school could better demonstrate its responsibility towards respecting the whole student. In addition, the purpose of this dissertation was to provide input into the current concussion care protocol and involving teacher perceptions and experiences was one way to verify meaningful changes in the protocol.

Teacher education demonstrated an effort by the school leadership to devote time and resources towards finding a best practice at this school for dealing with concussed students in the academic setting. Several in-service meetings were dedicated to educating

the adult community about concussions and the challenges a concussed student faces when returning to the classroom. Funds were utilized to provide baseline testing for all students and, in some cases, the school provided monies for further medical evaluations.

Second, the trust cultivated among faculty with regards to RTL allowed the continued growth of the program. Teachers recognized the need for equality and equity and accepted the limitations of concussed students. This openness led to the employment of emerging techniques and approaches within their classrooms. The process of a tiered RTL process with an escalating workload related to recovery is one example of a nuanced educational approach. As such, relationships were built to enhanced concussed students’ communications with their teachers and other adults involved in the process.

Factors to Consider When Implementing RTL Within a Concussion Care Protocol

It is incumbent upon a school’s leadership to create a safe learning environment where all stakeholders engage in the community. This safe space can enable stakeholders to freely and honestly share the problems affecting a school and work towards addressing and solving issues such as concussion care. Leaders are also called to embrace input and change in order to model and motivate faculty towards the school vision. Additionally, school culture should challenge the negative behaviors of members, especially those whose presence form the largest part of the positive school environment.

In the designing and implementation of concussion care protocols, school leaders should consider strategies that address the balancing of both RTL and RTP issues. Training should be based on how to properly balance these two issues academically, legally, and medically in order to assure proper care of students. The implementation process should focus on a clear and effective communication plan that demonstrates the

need for any policies adopted. School leadership should consider the following areas when implementing a concussion management system.

Student Safety

In accordance with the “ethic of care,” educational leaders should establish and adhere to the recommended standards of a comprehensive student care model in schools (Starratt, 2014). This includes the effective implementation of a standardized concussion management system to protect students while they are experiencing RTL and RTP. The implementation of RTL has only recently evolved given the heightened awareness regarding concussions and the gap of best practices in this area. Many schools have been slow to react to RTL and, in some cases, do not use best practices with RTP processes. There are number of reasons why a school may not implement a comprehensive concussion management system: lack of funding, untrained personnel, and/or institutional entrenchment. However, school leaders need to consider the ramifications for not addressing this issue and the impact it could have on student safety—not to mention the legal ramifications for negligence. Within this study, the 23 teachers interviewed all identified student safety as one of the reasons they supported the implementation and continued refinement of a RTL process. Thus, teacher support within this study was unanimous and all teachers agreed that student safety, even in the field of concussion management, should be a priority of the school.

Communication and Transparency

Communication was vital in the implementation of the RTL process in this case study. It was incumbent for school leadership to maintain an open dialogue with the entire concussion management team as the school adopted this concussion management

approach. This involved improving all forms of communication, including verbal, non-verbal or written communication strategies between team members, emails and memos, and personal communication with the student and parents. In addition, communication and transparency were constants in this case study, as the leadership of the school engaged a group of important stakeholders, including the parents of concussed students, the concussed student, coaches, teachers, and athletic department personnel. However, above all else, it was essential that the teachers supported the RTL given their regular contact and responsibility for students in the classroom. The primary goal in the implementation of the RTL process was to provide a comprehensive learning plan that involved medical insights, academic best practices, and personalized academic adjustments for concussed students.

Teacher Education

Teacher education is a key factor that must be taken into consideration when finding a solution to any problem within a school. Based on this study, educating the teachers was crucial in creating awareness and implementing a RTL process. School leadership had to place an emphasis of learning about concussions prior to beginning the RTL plan by providing numerous professional development opportunities. Because concussions are not visible injuries, it was difficult for teachers to understand why the school was placing such a heavy emphasis on RTL. It was only through many presentations by school leaders that the teachers began to appreciate the severity of head injuries and the need to systematically bring concussed students back to full learning. All teachers interviewed for this study referenced the importance of these educational efforts in order for them to best care for their students.

Team Approach

In conducting this study, the need for a team approach to concussion care emerged as, perhaps, the most important theme. Included in an ideal team are doctors, ATs, parents, teachers, coaches, administrators, and, most importantly, the concussed student. Coordination to inform and include all these constituents in all communication is pivotal to a successful RTL effort. All stakeholders must work together to support the concussed student while demonstrating support for the RTL process. Unity in this effort allowed all team members to work closely with one another through proper and effective communication, division of duties based on their role, and an acceptance of shared decision-making. Participants in this study noted that increased communication among these parties made for better instructional choices. Not only was the concussed student part of the plan after a concussion, but so, too, were parents and athletic personnel who could help monitor the student when he or she was outside the confines of the classroom.

Trust

Through the interviews in this study, teachers described the trust and satisfaction they had with the implementation of the RTL process. They expressed an appreciation for unity among themselves, school leaders, parents, and athletic personnel, which led to the optimal care of the school’s concussed students. The precise communication by the AT, supported by concussion specialists, allowed teachers to feel confident in permitting students with concussions to methodically work towards full RTL. This approach commenced with no academic work being allowed and then included incremental increases to homework and study time. Ultimately, the teachers allowed late work to be turned in and/or made up (see Appendix C). This shift in school culture would not have

been possible had it not been for the establishment of trust and the conviction of the teachers to want to do what is best for their students.

Implications for Action/Recommendations for Further Research

This study represented the efforts to understand teacher perceptions of the implementation of a RTL protocol within a concussion management system at one secondary school. As the national landscape on concussions in athletics becomes more prevalent across professional, collegiate, and secondary school sports and beyond, more attention is focused on post-concussion academic management. For students in secondary schools, that means an effective RTL protocol. As a result of this study, several key implications for action emerge.

Legislation on RTP exists in all 50 states with RTL laws already established in two states. The legal mandate of RTL is imminent in those states without a RTL protocol. School leaders should look at RTL implementation, whether it is legally mandated or not, as it is truly in the best interest of the student to manage RTL proactively. Additionally, schools seeking the broadening or development of a RTL protocol ought to require a review/audit of their current programs on supporting students with learning differences. This audit would be included in regularly scheduled accreditations and should address the following question, where does RTL fit into the school’s program for learning difference students.

While these implications for action center broadly on state and local policy, school organizational structure and student support services and/or intervention practices, recommendations for further research center on the expansion of a RTL protocol. Specifically, future research might focus on student or parent perceptions of RTL

protocols. Also, one could also study the effectiveness of specific features of the RTL protocol from assignment modifications to classroom adjustments—little is known as to the actual academic impact prolonged RTL accommodations might have on secondary students.

This study gathered perceptions from teachers who had worked with concussed students and their perceptions about the ways they applied the RTL protocol in their own classroom setting. A future qualitative study centered on the student’s experience might further illuminate the ways a RTL protocol supports or hinders student learning from the student perspective. Next, at the core of all teaching and learning are issues of equity and access. The question of students’ access to proper RTL is an issue oriented towards the best interests model because it centers on fundamental student support. However, this study focused on a well-resourced school in the Los Angeles area in the United States that researched, developed, and implemented a concussion management system with no use of public funds. While each of the themes could benefit from further exploration, the following specific questions are implications for further research.

- To what extent are other public or private schools providing concussed students equity and access with regards to RTL?
- While this study captured a moment in time of one group of teachers’ perceptions upon implementation of a RTL protocol, a longitudinal study examining concussed students’ experience of a RTL protocol may yield a deeper understanding of changes in RTL practices over a longer period.
- This study focused on teachers and their perceptions about a concussion management system, specifically regarding RTL. A future study could

concentrate on concussed students or their parents and their experience in a RTL protocol.

- To what extent is a concussion management system possible and sustainable in schools with fewer resources? Are there new school or community partnerships that could emerge to share the resources necessary for this type of program?

Summary

This dissertation in practice focused on gathering teacher perceptions about the implementation of a RTL protocol at a private secondary school. The themes of the study were extracted from interviews conducted with 23 teachers in the spring of 2016 and critically reviewed their experiences in implementing the concussion care RTL protocol with concussed students in their classrooms. In examining the school’s prior lack of concussion care protocol, it was clear that the new processes for RTP were perceived as strong by teachers in this study.

Shortly before this research was conducted, it is notable that there was a gap in literature and practices with regards to RTL. Thus, a progressive RTL process was developed and refined in order to allow students to incrementally return to learn by limiting the amount of academic work they could do on a given day. This approach was communicated to all teachers, particularly those who were dealing with concussed students. Interviewing 23 teachers in the spring of 2016 and critically reviewing their lived experience utilizing this protocol further informed its refinement after the study’s conclusion. Their feedback was invaluable in refining practices to best care for the students. As a result of this study, multiple, and now annual, presentations inform the faculty regarding the school’s concussion care protocol. Participants validated these

sentiments by sharing frustration about the lack of consistency with regards to the RTL process. Further, the participants expressed fear that, under the prior lack of RTL protocol, they may have caused harm to the concussed students.

To best support the students, the study site’s leaders developed a comprehensive concussion care protocol for all students (athletes/non-athletes) intended to serve as the gold standard for high schools across the country. The context for developing this program required research (literature review, conference attendance, investigation of best practices and existing protocols). The school began to baseline test every student, nearly 1,250 students in all, and was among the first in the nation to do so. Additionally, the school partnered with five leading concussion specialists in the local area to support the policy efforts. This approach ensured consistency as the student moved through the RTL processes as baseline data was shared with the entire team, including these specialists. All study participants expressed gratitude for no longer having to arbitrate whether a student was fit to RTL. The inclusion of experts provided them with great confidence in the protocol. Further, all participants shared an appreciation for the constant communication and transparency exhibited in this RTL process.

The context for the development and refinement of a RTL protocol can also be found in the school’s mission statement. The process of developing this protocol modeled for the students the concepts of being leaders and pioneering this comprehensive protocol that included an often-ignored component of RTL and acting in a just manner, as these efforts were motivated by the love and personal care of all students.

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Appendix A

Invitation Letter

Dear Fellow Jesuit Educator,

My name is _____ and I am a doctoral candidate at Creighton University conducting a study on the return to learn practices for concussed students in partial fulfillment for the Doctorate in Interdisciplinary Leadership. The purpose of the study is to explore and understand the “return to learn” practices for concussed students at one Jesuit High School with an aim to design an evidence-based response to the problem of a systematic concussion protocol that accesses a variety of stakeholders to support the students’ best interests in RTL and RTP.

Currently, concussion protocols are dominated by “return to play” (RTP) guidelines. RTP is a process that determines when a concussed athlete returns to competition and begins after all symptoms are resolved and brain functions have returned to normal paradigms. However, there are minimal resources available for school leaders to use in determining when a student is ready to reenter the classroom or “return to learn” (RTL).

The purpose for this letter is to invite you to participate in the study. You were selected as a possible participant because of your engagement and support with concussed students on this campus. As a teacher, your role is important to the ways concussed students are re-admitted to the learning environment. Similar to an athletic coach, RTP protocols call for an easing into athletic activities before engaging in full and active sporting events. Your assistance in this study will contribute to a very limited body of information on concussion care management in Jesuit high schools.

All content from your interview will remain confidential and transcripts of your interview will be shared with you to ensure accuracy.

If you agree to participate in this study, the following will be requested of you:

- Agree to an interview, 20–40 minute in length

Please contact me by February 15 by reaching me at extension _____.

With Gratitude,

Appendix B

Interview Instrument

Time and Date of Interview: TBA
Place: TBA
Interviewer: _____, Doctoral Candidate
Interviewee: TBA
Position of interviewee: Graduate Student Researcher

Script

Welcome and thank you for participating. My name is _____ and I am a doctoral candidate at Creighton University in Omaha, Nebraska. I am conducting a research study in partial fulfillment of the requirements for a doctoral degree in interdisciplinary leadership.

This interview will take about 20 minutes and will include approximately 15 questions. You will be asked several questions on your school’s approach to concussion care management. If, at any point, you don’t feel comfortable, or you don’t understand, please feel free to stop me. Do you have any questions about this?

To facilitate my note-taking, I would like to audio tape our conversations today. For your information, only I will listen to the tapes. I will also have the files transcribed via a digital transcription service that will maintain your anonymity. If at any time during the interview you wish to discontinue the use of the recorder or the interview itself, please feel free to let me know. All of your responses are confidential. Your responses will remain confidential and will be used to develop a better description of current practices in concussion care management.

At this time, I would like to remind you of your verbal consent to participate in this study. I am the responsible investigator. You have verbally assented to continue this interview and that: (1) all information will be held confidential, (2) your participation is voluntary and you may stop at any time if you feel uncomfortable, and (3) risks involved in participation are minimal. I am asking that you not use student names as we discuss this topic in order to protect student privacy. After this interview concludes and the recording has been transcribed, I will ask you to verify the accuracy of the transcription at which time you are free to add to or alter your responses. I will keep the other in a safe place separate from your reported responses.

Do you have any questions or concerns before we begin? Thank you.

Interview Questions

1. How long have you been teaching? What grade levels do you teach?
2. How long have you been at this school site?
3. In addition to classroom instruction, are you involved in other aspects of school / student life?
4. What has been your experience with the concussion program? Baseline testing?
5. Share your main concerns regarding students returning to the classroom after a concussion.
6. How many students in your classes this school year have suffered a documented concussion?
7. What are your concerns about concussed students?
8. Describe how you became aware of the concussed student(s) in your class.
9. Explain your approach towards the concussed students given the information provided by the school. What might the process look like in your mind?
10. Tell me about any interactions you’ve had with leadership/athletic trainer or others about integrating a student back into the classroom after having sustained a concussion.
11. Describe any interactions you have had with parents regarding concussions.
12. Do you think the school is overreacting to the phenomenon of concussions? Is the school not doing enough to help concussed students?
13. Do you feel this program is in line with the school’s mission? Why?

Post-Interview Comments and/or Observations:

Before we conclude this interview, is there anything else you would like to share?

CONTEXT:

The research site is a large Catholic secondary school in Los Angeles that is owned and operated by a religious order. Participants were purposefully selected because they can speak to the research on ways educators and those in educational settings support concussed students through a return to learn management system. The criteria for the sample included the following: 1) 15-20 full-time instructors who have had experience with at least one concussed student; 2) 2 members of the leadership team.

Appendix C

Central Catholic High School Concussion Policy

A concussion is a brain injury caused by a traumatic blow to the head or a sudden rotation of the head. Even though most concussions are mild, all concussions are potentially serious and may result in complications including prolonged brain damage and death if not recognized and managed properly. Signs and symptoms can show up immediately or over several hours after the injury. Attached is a sheet of concussions signs and symptoms.

Central Catholic High School realizes that when a teenager sustains a concussion there must be protocols and procedures in place to allow for a student/athlete to recuperate and heal from the injury so there is no permanent or long-term disabilities either mentally, physically or emotionally. Therefore, Central Catholic requires all students to have current concussion baselines on file with the Head Athletic Trainer before each academic year.

Concussion diagnoses have increased over recent years for many reasons. Reports of permanent brain damage, suicides from repetitive MTBI (mild traumatic brain injury) and death. The evaluation and diagnosis of concussions has also improved and widened the scope of what is a concussion. Years ago medical doctors thought that a person had to lose consciousness in order to have a concussion; this theory has been proven wrong. The term getting your “bell rung” can no longer be used when someone sustains a blow to the head that results in a headache. These are only a few examples of how concussions have become a central topic not only in athletic competition but in day-to-day life. Although, concussions primarily happen in athletics and contact sports such as football, soccer, and lacrosse an MTBI (Mild Traumatic Brain Injury), can occur in any sport or at any time. Research has shown that the recovery for most concussions involving school age students is one to three weeks.

Terminology that is important to understand.

Baseline Tests – ImPACT completed before freshmen and junior year, KD Test, SCAT 3 and Balance Tracking completed every year

MTBI – mild traumatic brain injury, most concussions fall into this category

RTP – Return to Play protocols are protocols developed to ensure a safe return to play following a concussion. The minimum amount of days once RTP is initiated is 5 days without any symptoms returning.

Level 1 -No Activity – Physical and cognitive rest limited by symptoms.

Level 2 – Light Aerobic Exercise – Walking, Swimming, Stationary bike, activity no more than 20 minutes. Must be asymptomatic

Level 3 – Sport Specific Exercise – No contact can practice in drills that are sport specific and conditioning.

Level 4 – Non Contact Drills- More complex drills with pads and helmet (if needed) no contact.

Level 5 – Full Contact Practice – After medical clearance return to normal activity.

Level 6 – Return to play – No Restrictions

An athlete must be at each level for 24 hours, and cannot advance a level if symptoms return.

RTL – Return to Learning protocols that Central Catholic has developed are guidelines for teachers to help with the student’s recovery. Most concussions will heal within a one to three week period. The RTP and RTL protocols will be used in conjunction with one another. This will ensure that once a student is cleared to RTP level 6 that all academic adjustments and/or accommodations will be stopped. Teachers will be asked, as needed, how the student is performing in class and his academic load. The RTL protocols are;

Level 1 – No academic activity, does not attend school, brain rest is needed to help speed the recovery of injury.

Level 2 – Return to school, with a note from one of CCHS’s concussion specialists, attends half day school preferable hours 2, 3, 4. Student is allowed to sit in class, but is still having some symptoms should have clear desk, be allowed to put head on desk and/or go to office and rest. Depending on symptoms student may begin academic work for periods of 10 minutes with at least 30 minutes rest in between.

Level 3 – Student is full day of class; academic load can increase to 20 minute periods as long as student is asymptomatic. Student should be allowed to allow putting head on desk and/or going to office and rest if symptoms develop.

Level 4 – Student full day of class, allowed taking notes, academic work load can increase to 30 minutes with a 15 minute break as needed. Should begin to make up assignments in small portions. Only assignments that are necessary for grade should be completed. Teachers need to understand that student has seven classes of academics to make up and must be work with student and concussion management team to aid with student’s recovery.

Level 5 – Student is back to normal academics no restrictions, should be making up assignments in a timely manner.

Academic adjustments – period of one to three weeks after injury where non formalized adjustments are made to meet the students’ needs to aid with recovery. Every student will be different so adjustments have to be curtailed to meet the student’s needs.

Academic accommodations- period of time after three weeks from injury where more formal accommodations are instituted which would involve standardized testing, extra time for work and possible change in class schedule. Physician’s notes need to be turned

in to Assistant Principal of Curriculum and Instruction to help verify student’s recovery from concussion is taking a longer time.

Academic modification – long-term education changes, need an IEP or 504 filled out.

In order for a student to recover from a concussion in a timely matter, most literature illustrates a team approach involving but not limited to physician, parents, administrators, athletic trainer, teachers, counselors. Due the nature of a concussion and the constant research being performed Central Catholic has implemented a program that is designed to take all the various parts of a concussion and streamline the recovery process so that communication and status updates are done quickly and effectively.

Concussion Management Team – Head Athletic Trainer, Physician, parents, Principal, Assistant Principal for Student Life, Dean of Men, counselor. Led and coordinated by the Head Athletic Trainer,(Concussion Program Supervisor-CPS) job is to evaluate and assess the extent of the injury. The CPS will inform all members of the team appropriate rest from athletics and academic activities until the athlete has recovered fully from the injury. A note form the physician must be turned into the Head Athletic Trainer and after every visit when academic adjustments are made. In order to comply with State law any athlete must be seen by a Medical Doctor when there is a suspected head injury. A note from physician for every visit needs to be turned into Athletic Trainer. All students with concussions must check in with Head Athletic Trainer, at least once a day until the student has recovered from injury.

Once a student has been cleared to return to full activity without restrictions all academic adjustments/accommodations will be removed and the student will resume his normal academic load before the injury. At no time should an athlete be allowed to return to play and still have academic adjustments or accommodations.

The following are procedures that should be followed in the event a student suffers a concussion.

CONCUSSIONS INVOLVING STUDENTS PARTICIPATING IN CENTRAL CATHOLIC ATHLETICS

1. All head injuries are to be reported the Athletic Trainer – immediately. If the athlete is unconscious 911 should be activated.
2. The Athletic Trainer will perform a concussion evaluation either using the KD Test, and SCAT3.
 - a. Once the evaluation is performed, in the absence of the Head Athletic Trainer, the Head Athletic Trainer will be notified about the injury.
3. Parents of the injured player will be notified by Athletic Trainer and instructed that they need to come a pick up their son. If Athletic Trainer and parents feel the faster way to send player home is by carpool, then the student may go home with another adult. At no time will a student be allowed to go home with another student when there is a suspected head injury.
4. The parents will be given a concussion packet (see attached) explaining the policies, and procedures in regards to a concussion. The packet includes the following
 - a. Letter explaining concussions and the procedures that need to be followed
 - b. SCAT 3, KD test evaluation
 - c. Injury Referral letter for physician to fill out
 - d. On Field sign and symptom check list
 - e. Well Fargo Concussion policy, list of physicians that the athlete must see in order to return to play.
 - f. Wells Fargo insurance information
 - g. Academic adjustment form
5. In accordance with California State Law, all athletes suspected of having a head injury must be seen by a Medical Doctor before they are allowed to return to school or activity.
6. The Head Athletic Trainer will notify the concussion management team of the injury.
7. Under the advice the Principal, the student will be advised to stay home from school for one to two days to allow time for brain to rest and begin recovery. During this time the student will be instructed not to do any form of academics, video games, texting etc., once again to allow time for the brain to begin recovery.
8. During the first 24 – 48 hours the student must see one of CCHS’s concussion specialists, who will provide a note for the Athletic Trainer confirming that the student has sustained a concussion and might need academic adjustments during their recovery.
9. The Head Athletic Trainer will notify the student’s teachers and counselor. The Head Athletic Trainer will be the lead coordinator, in matters relating to academics, for the student, parents, counselor and teachers during the recovery from the injury. Adjustments might be but not limited to allowing more time for assignments, postponement of tests and projects etc.

10. Once the student returns to school, the student must check in with the Head Athletic Trainer daily for both academic updates and return to play protocols that are being followed.
11. Student will need to complete post-injury tests involving ImPACT, KD Test, SCAT 3 and Balance Tracking to help establish progress in recovery. All tests will be performed under the supervision of the Athletic Trainer.
12. The Athletic Trainer will forward all test results to one of CCHS’s concussion specialists.
13. If multiple visits are required by the concussion specialist, the student will need to provide updated notes from the specialist as to status both academically and athletically.
14. Once a student has been cleared to return to play without restrictions, all academic accommodations will be removed.

**STUDENTS SUSTAINING CONCUSSION OUTSIDE CENTRAL
CATHOLIC ATHLETICS AND/OR NOT RELATED TO CENTRAL
CATHOLIC HIGH SCHOOL**

Students sustaining a MTBI away from school or involved with activities outside of the Central Catholic Interscholastic Athletic program will follow the following policy

1. A student who has sustained a concussion outside Central Catholic’s Interscholastic Athletic program must notify the Head Athletic Trainer and Dean of Men before returning to school.
2. Under the advice the Principal, the student will be advised to stay home from school for one to two days to allow time for brain to rest and begin recovery. During this time the student will be instructed not to do any form of academics, video games, texting etc., once again to allow time for the brain to begin recovery.
3. The student upon returning school must provide a note from their physician to the Head Athletic Trainer, as to any adjustments that might need to take place. The student must see AP before being allowed to return to class.
4. The Head Athletic Trainer will be in charge of notifying the student’s teachers and counselor. . The Head Athletic Trainer will be the lead coordinator, in matters relating to academics, for the student, parents, counselor and teachers during the recovery from the injury. Adjustments might be but not limited to allowing more time for assignments, postponement of tests and projects etc.
5. Once the student returns to school, the student must check in with the Head Athletic Trainer daily for both academic updates and return to play protocols that are being followed.
6. Student will need to complete post-injury tests involving ImPACT, KD Test, SCAT 3, Balance Tracking to help establish progress in recovery. All tests will be performed under the supervision of the Athletic Trainer.
7. If multiple visits are required by the concussion specialist the student will need to provide updated notes from the specialist as to status both academically and athletically.

8. A student will not be allowed to compete in any Central Catholic activities until all academically adjustments have been removed and the student is performing at the academic standard he was at before the concussion.

Appendix D

Concussion Physician Progress/Clearance

_____ High School

Concussion Physician Progress/Clearance

INJURY STATUS

EXAM DATE _____

_____ The above student has been diagnosed with a concussion. The student is scheduled for a follow up visit on _____

_____ The above student was evaluated and did not have a concussion. There are no limitations on school and _____

STUDENT NAME _____ **DOB** _____

-

Physician Signature _____ **Date** _____

Parent Signature(required before full return to activity)

ACADEMIC STATUS

_____ The above student is not to attend school until _____

_____ The above student may return to school on a limited basis increasing his attendance based on the "Return to Learn" program at Central Catholic High School.

_____ The above student is no longer experiencing any signs or symptoms of a _____

PHYSICAL ACTIVITY STATUS

_____ The above student is not to participate in any physical, athletic or PE activity.

_____ The student may begin the "Return to Play" protocol following CA state law on "Return to Play"

Date _____

Appendix E

CCHS Concussion Return to Learn Instructions

STUDENT NAME _____ DATE OF EVALUATION _____

SEEN BY _____

This student has been diagnosed with a concussion and is currently under our care. Due to the nature of this injury I/we recommend that the following academic adjustments be made to aid with the student’s recovery. These suggestions for academic adjustments are to be individualized for the student as deemed appropriate in the school setting. Adjustments can be modified as the student’s symptoms improve/worsen.

Area	Adjustments Needed	Comments
Attendance	<input type="checkbox"/> No School until ____/____/_____ <input type="checkbox"/> Partial school days, gradual return to school Beginning on ____/____/_____ <input type="checkbox"/> Full School Days beginning on ____/____/_____ ____/____/_____ 	
Breaks	<input type="checkbox"/> Allow breaks during school day as needed <input type="checkbox"/> If symptoms worsen allow student to report to main office <input type="checkbox"/> Student should have rest breaks every 2 hours for 15-20 minutes. <input type="checkbox"/> If symptoms do NOT subside after 30 minutes Student should be dismissed to go home for remainder of day.	

Visual Stimulus	<input type="checkbox"/> Limited computer, TV Screen, bright screen use <input type="checkbox"/> Allow student to complete handwritten assignments <input type="checkbox"/> Allow student to wear sunglasses, hat in school <input type="checkbox"/> Change classroom seating to front of room as needed.	
Auditory Stimulus	<input type="checkbox"/> Avoid loud classroom activity <input type="checkbox"/> Avoid loud places <input type="checkbox"/> Lunch in quiet places <input type="checkbox"/> Allow class transition before bell	
Testing	<input type="checkbox"/> No Tests or quizzes until _____/_____/_____ <input type="checkbox"/> No Standardized Tests <input type="checkbox"/> Alternative testing methods (oral, take home) <input type="checkbox"/> Only one test/quiz per day <input type="checkbox"/> Additional time for tests/quizzes	

_____ Student is in need of an IEP and/or 504 Plan (for prolonged symptoms lasting >3 months, interfering with academic performance)

Once student is asymptomatic the student can begin the “Return to Learn” program outlined below.
 Student advances one level per day as tolerated. Student must be able to complete level without any symptoms before progressing. School Counselor will assist in the scheduling of tests/quizzes and assignments so that make-up work is completed in a timely matter.

Level	Academic Assignments	Comments
1	Full day of school <input type="checkbox"/> 10-15 minute homework periods. Break of _____ 20-30 minutes in between* <input type="checkbox"/> Limited computer work *max three hours including breaks	

2	_____ 15-30 minute homework periods. Break of 10-20 minutes in between.* _____ Allow computer time as long as symptom free _____ Begin make up quizzes, no test taking *max three hours with breaks	
3	_____ 30-45 minute homework periods. Breaks of 5-10 minutes* _____ Begin Test make-ups. Only one test per day *max three hours including breaks	
4	_____ No restrictions, schedule all assignments, tests Projects to be completed with teacher and counselor	

Adjustments can be made during the “Return to Learn” based on how well the student’s recovery is progressing.

This form is designed as a guide to aid parents, teachers, counselors and the student in preparing a full return to the academic standards at CCHS. The most important concern CCHS High School has is the health of the student, this will help relieve any stress or undue pressure the student might have in recovering from a concussion. If any parties involved should have any questions about the “Return to Learn” process at CCHS, please contact AT immediately.