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Curiosity, Motivation, Autonomy, and Lifelong Learning in Education and the United States Marine Corps

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Cynthia Malmquist - Capstone

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Curiosity, Motivation, Autonomy, and Lifelong Learning in Education and the United States Marine Corps

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Abstract

Curiosity, intrinsic motivation, and autonomy-supportive teaching all promote lifelong learning in both the classroom and Marine Corps. Humans are all born with curiosity. Children inherently practice forms of intrinsic motivation. Most would agree that they do not like being micromanaged - they enjoy a sense of freedom when completing tasks. Despite this, many students learn in a controlling environment and many Marines work under controlling leaders. Though a large amount of time is spent on learning through the first 18 years of life, lifelong learning does not come naturally and is not commonly practiced. The research and ideas discussed below are all means to promote a positive learning environment for students in the classroom and the population within the Marine Corps. If curiosity, intrinsic motivation, and an autonomy-supportive teaching environment can be promoted, it equates to creating a foundation for lifelong learning. These attributes promote confidence, self-identity, and growth as an individual. They will lead to higher test scores, morale, and mission accomplishment without that being its purpose. Lifelong learning can be something we all strive for and seek for ourselves and our Marines. It will benefit us as leaders and the Marine Corps as an institution. There are tangibles to implement in the Marine Corps to promote these attributes.

Introduction

Curiosity, intrinsic motivation, and autonomy-supportive teaching all promote lifelong learning in both the classroom and Marine Corps. Humans are all born with curiosity. Children inherently practice forms of intrinsic motivation. Most would agree that they do not like being micromanaged - they enjoy a sense of freedom when completing tasks. Despite this, many students learn in a controlling environment and many Marines work under controlling leaders. Though a large amount of time is spent on learning through the first 18 years of life, lifelong learning does not come naturally and is not commonly practiced. The research and ideas discussed below are all means to promote a positive learning environment for students in the classroom and the population within the Marine Corps. If curiosity, intrinsic motivation, and an autonomy-supportive teaching environment can be promoted, it equates to creating a foundation for lifelong learning. These attributes promote confidence, self-identity, and growth as an individual. In addition, they will lead to higher test scores, morale, and mission accomplishment without that being its purpose.

On paper, the majority of the time spent in a classroom is focused on "learning." At first appearance, that is what is taking place but so much of what is learned is just as quickly forgotten so is it truly being learned? In the first 18 years of life, kids spend nearly the same amount of time at school than at home. It would be understandable to assume that this could equate to creating lifelong learners since so much time is spent learning throughout these 18 years. It doesn't. Lifelong learning isn't something that naturally becomes a part of one's identity. It is something that must be practiced. The combination of curiosity, intrinsic motivation, autonomy, and lifelong learning result in passionate individuals who have the drive, desire, and confidence to go above and beyond in all aspects of life rather than simply going through the motions.

There are countless differences between primary education and the military (more specifically the Marine Corps) but there are also plenty of similarities. Both are heavily influenced by politics - big decisions are made without coordination, involvement, or even

knowledge from its key players. Both have a substantial amount of overhead leadership and supervision - Principals in schools and Commanding Officers in the Marine Corps. Both have small unit leadership - teachers and administrators in schools and Officers and Staff Non-Commissioned Officers in the Marine Corps. Both have personnel that are learning from their leadership - students in classrooms and Marines in the Marine Corps. Lastly, both have certain rules to adhere to when carrying out plans or making decisions - curriculum in schools and policies and orders in the Marine Corps. Throughout this research, the idea of teacher to leader as well as student to Marine are interchangeable.

Curiosity

People are born with an innate sense of curiosity. They naturally have an internal desire to learn. That's why kids constantly ask "Why?" They are genuinely interested in the reasoning. Between ages eight and nine, children start to lose the need to learn something new. Unless actions are taken to prevent curiosity from going away, they decrease over time.. Promoting curiosity enables a stronger sense of self identity and commitment to learning. It enables students to "become active agents of their own learning process. It is selfgenerated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals" (Zimmerman, 2005, p. 14). Promoting curiosity increases the desire for lifelong learning.

Around 400 BC, Socrates said that "all men by nature desire to know." He stated that "the unexamined life is not worth living." From three years old on, we appreciate knowing the "why?" behind the tasks we are given, things that need to be done, and meaning behind ideas. This "curiosity is a form of intrinsic motivation that is key in fostering active learning and spontaneous exploration. For this reason, curiosity-driven learning and intrinsic motivation have been argued to be fundamental ingredients for efficient education" (Freeman et al., 2014, p. 8411). Proof of this can be seen when a student gets excited about a certain subject or topic in class - the learning becomes more effortless, the material becomes more interesting, and the student will tend to go above and beyond learning the bare minimum. As Oudeyer and Lopes discuss throughout their article, "elaborating a fundamental understanding of the mechanisms of curiosity, and of which features of educational activities can make them fun and foster motivation, is of high importance with regard to the educational challenges of the 21st century" (2016, p. 258). Curiosity not only helps with the challenges that are faced in the classroom but they can create a foundation for lifelong learning.

Curiosity can be compared to our senses because it "can be developed in the way painters see color or musicians hear sound. If only it was as simple to elicit curiosity from our students as it is to impart content to them, all learning of content would follow automatically. We would like to remain motivated and curious every day during every class we teach, week after week. Yet, we cannot reasonably expect this from ourselves" (Brand, 2009, pp. 95-96). Curiosity cannot take place without some freedom, a sense of choice, encouragement, positive role models, and creating an environment that promotes learning. If curiosity can be encouraged, it leads to self confidence and the drive to explore. This exploration sparks intrinsic motivation.

Intrinsic Motivation

Not only does motivation affect how we perform, it also shapes our identity into lifelong learning and is "another key component of self regulated learning. Only motivated individuals will proactively exercise appropriate learning strategies. Self regulated strategies are of little value if people cannot motivate themselves to use them" (Liu et. al, 2020, p. 378). There are different types of motivation - intrinsic, extrinsic, and amotivation, the most important being intrinsic when it comes to lifelong learning. With this comes the constant desire to continue seeking self improvement and reaching more challenging goals both personally and professionally.

Intrinsic motivation is internally created and "is likely responsible for the preponderance of human learning across the life span, as opposed to externally mandated learning and instruction" (Ryan & Deci, 2020, p. 2). When we do something because we want to (not because someone or something else is persuading, forcing, or encouraging us to do), we have a higher sense of accomplishment when we achieve the task at hand. It is something that becomes ingrained in us over time - "the more internalized the motivation, the more it becomes part of a learner's identity" (Ryan & Deci, 2020, p. 3). It becomes a part of who we are as individuals.

Extrinsic motivation on the other hand is a "reliance on tangible rewards or punishments in the classroom that not only depresses important forms of learning but also thwarts the goal of creating self-motivated, lifelong learners" (Sheldon & Biddle, 1998, p. 170). When we are given incentives, rewards, or punishments for doing certain things, we are extrinsically motivated. This type of motivation "concerns behaviors done for reasons other than their inherent satisfactions" (Ryan & Deci, 2020, p. 2). In addition to only providing temporary results, it is not as effective in the classroom nor does it instill lasting behavioral improvements.

Amotivation, the last form of motivation, "refers to lacking intentionality. Amotivation, all too common in classroom settings, can result from either a lack of competence to perform, or

lack of value or interest. Amotivation has been a strong negative predictor of engagement, learning, and wellness" (Ryan & Deci, 2020, p. 3). When a student has amotivation, they are physically present in the classroom but not mentally present. The blank stare, dazed and confused appearance, lack of involvement, and overall willingness to be a part of the experience doesn't just go away. Amotivation equates to going through the motions and "is significantly associated with lower school achievement. The fact that students who feel like they do not know why they are in school have difficulty maintaining their grades is not surprising. Amotivation entails feelings of alienation and incompetence, bothof which will naturally lead to problems in academic self-regulation" (Taylor et. al., 2014, p. 355). When a student lacks confidence, feels alienated, and incompetent, it is difficult to reach them on an intellectual level. They not only don't want to learn but they feel that they are unable to do so.

Without a sense of purpose, an understanding of "why," internal motivation, and any desire for lifelong learning, a student loses out on opportunities for growth and development. These losses become a part of who we are as future employees. In order "for motivational change to take place, it is crucial to promote the development of self-esteem, the ability to accomplish something, and the ability to contribute to the welfare of others" (Christodoulou et al., 2016, p. 609). By promoting the development of these attributes that significantly improve our intrinsic motivation, we perform at a higher standard and feel better about who we are. It makes us better students and Marines.

Throughout the United States, attrition and the ability to retain employees is consistently a challenge. Though "there are multiple mechanisms that explain different reasons for attrition, the decision-making processes involve the same well-documented predictors of turnover in the industrial-organizational psychology literature, including personality traits and motivation, as well as job attitudes (including job satisfaction and organizational commitment)" (Vanegas et. al, 2022, p. 148). When an individual is motivated, they work harder for themselves as well as the institution, teacher, or leader. When motivation is lacking or missing completely, there is no internal drive to do anything above the bare minimum. This either leads to attrition (which loses money for the Marine Corps) or a sub part performer who has a negative impact on the mission. Similarly in a classroom, a motivated student will go above and beyond to better themselves and will end up performing at a higher level (with or without purposely trying). An unmotivated student may perhaps drop out, choose not to continue their education, or do what is required just to get by but nothing more.

In the last decade, three different studies were conducted specifically on motivation. These studies "show that intrinsic motivation was the only motivation type to be considered positively associated with academic achievement over a one-year period" (Taylor et. al., 2014, p. 342). It's just a matter of implementing best practices in order to assist students with increasing their intrinsic motivation. Intrinsic motivation is something that can be worked on at a young age. Humans are born with the need and want to learn but over time, it decreases unless it is encouraged, promoted, and something that is practiced. Students enjoy freedom so when they "experience *a sense of choice*, they feel more ownership of activities and greater autonomy, resulting in enhanced intrinsic motivation" (Ryan & Deci, 2020, pp. 3-4). By giving students and Marines a "sense of choice," it can lead to pride, purpose, and more effort. Because motivation is something that can be built over time, it can strengthen or weaken from childhood through adulthood. If there is no motivation, it can be a habit that is created. If the motivation is there for the wrong reasons, the bad habits can be broken. Like lifelong learning, it takes continuous effort and practice. A student's well being and attitude matter when it comes to their motivation - a student who "has positive judgments about their capabilities may tend to have more approach type motivations, while students having low judgments about their capabilities is linked to avoidance type motivation" (Fadlelmula et. al., 2015, p. 1370).

Autonomy-Supportive Teaching

In a study conducted in 2019 by Patall et al., they "found that in lessons wherein teachers engaged in autonomy-supportive behaviors such as offering choice, providing rationales, focusing on students interests or questions, and other specific autonomy-supportive behaviors, students reported greater interest in the world" (Ryan & Deci, 2020, p. 4). When the material sparks curiosity, explains the "why," and provides opportunities for students to explore, it causes the learning experience to be positive and effective. In another study conducted in 2011, Reeve and Tseng looked into biological mediators to try to understand how cortisol levels (the higher the cortisol, the higher the stress) vary when exposed to three different conditions of learning teachers were either autonomy-supportive, neutral, or controlling. It was determined that students who were taught by a controlling teacher had the highest levels of cortisol. Those who were taught by an autonomy-supportive teacher had the lowest level of cortisol. (Reeve & Tseng, 2011, pp. 63-74). When students are taught in a controlling environment, there is an increased level of cortisol. Long term effects of high cortisol levels take a toll on the body over time. It "puts the individual at risk of negative biological outcomes (e.g. diabetes, hypertension), and it has further been linked to maladaptive cognitive outcomes, such as poor memory, impaired problem solving, and poor intellectual functioning in general" (Reeve & Tseng, 2011, p. 72). Not only are there physical and physiological tolls when cortisol levels are increased over an extended period of time, mental capacities are weakened as well.

Leaders, teachers, and those in the position to influence learning can increase or decrease levels of motivation in and out of the classroom environment. It has been found that "some individuals are predisposed to attrition because of poor motivation/work ethic or a propensity to work multiple jobs or because of their avoidance of perceived negative features of the work environment" (Vanegas et. al, 2022, p. 147). Students can go through the exact same curriculum but depending on who their teacher is can play a large role in how their students will respond. If the learning environment is positive, allows choice, encourages curiosity, and there is a sense of motivation between the students and teachers, everyone will benefit. If the environment is controlling, negative, and tense, the students and teachers will have a far less enjoyable and beneficial learning experience. Though we have the capability to control our emotions and choose how to respond to certain situations and environments, oftentimes we cannot help but be affected by who and what we are surrounded with. The teaching and learning environment that we create makes a significant impact on the outcome of the learning.

As human beings, we all have internal needs. They vary slightly from person to person but "adults are most ready to learn when the learning meets an immediate life need and are most motivated when it fills an internal need" (Day et. al, 2009, p. 145). When these internal needs are met, it feeds an individuals' curiosity and promotes personal satisfaction. In addition, the "research indicates not only that pressures from above and below were both negatively associated with teachers' autonomous motivation for teaching, but also with their autonomy support of students. When teachers experienced work overload or disruptive students, the teacher's autonomous motivation for teaching was lower, as was their perceived competence, leading in turn to more emotional exhaustion and less sense of accomplishment" (Ryan & Deci, 2020, p. 7). On top of negatively impacting students, controlling environments take a toll on the teachers and administrators as well. If an autonomy-supportive teaching environment can be promoted and encouraged from the top down, all parties will benefit.

It is widely discussed that autonomy support can lead to lasting benefits in both the classroom and work environment. It has been shown that "the expected increases in teacher autonomy support are associated with both increased feelings of efficacy and the adoption of more intrinsic goals" (Ryan & Deci, 2020, p. 7). If a student has more of a choice, they inherently have more buy in. This is why "motivational factors, including self-efficacy and goal setting are considered as important features in determining students' self-regulatory behaviors and academic achievement" (Fadlelmula et. al, 2015, p. 1356). In order to effectively promote lifelong learning in school, there must be autonomy both in and out of the classroom for our students. When we create controlling environments, it has been shown to decrease our motivation. In studies done with autonomy-supportive environments, the students "have more intrinsic motivation, perceived competence, and self-esteem, better grades, greater internalization for learning activities, and lower dropout" (Ryan & Deci, 2020, p. 3). By enabling freedom, room for curiosity, thought, and problem solving, a more positive learning environment is inherently created.

In both primary education and within the Marine Corps, a teacher or leader's ability to create this type of atmosphere can positively influence their student or Marine's level of motivation. In research conducted by Ryan and Deci, they found that "people are more likely to be intrinsically motivated, or at least have a more autonomous level of extrinsic motivation, if they know they can do the task (sense of competence); have a positive relationship with a support person with whom they feel secure such as a mentor (relatedness); and feel that they have a choice in performing the tasks (autonomy)" (2000, p. 70). An autonomy-supportive

environment creates a foundation of freedom, a sense of choice, and an opportunity for making individual decisions on assignments and tasks. This ability to explore with autonomy enables curiosity and intrinsic motivation - both enabling lifelong learning.

Lifelong Learner

What does it take to be a lifelong learner? It means that they "display an attitude and ability that promotes them to learn across their life spans. They have the capacity for selfdirection, meta-cognitive awareness, and disposition toward lifelong learning" (Crow, 2006, p. 23). When a child develops this capacity at an early age, they gain a heightened internal motivation that enables them to seek self improvement throughout their life. This internal drive, dedication, and willingness to work hard for themselves rather than someone or something else equates to higher morale, a stronger sense of identity, and overall happiness. Someone who is a lifelong learner is a "motivated person" and this motivation is "the key to lifelong learning" (Crow, 2006, p. 23). When lifelong learning for children in school is the goal rather than specific checkboxes marked per a curriculum, timetable, or district policy, these positive habits, passion for learning, and motivation are carried throughout adulthood. When the information is relevant and connects with our lives, "we recognize that the information is going to stick and stay... learning should not stop" (Moon, 2021, p. 3). It creates buy-in and an understanding for learning at an early age rather than something that has to be done. This buy-in is something that we need throughout our lives. If we aren't convinced of something, we care less. If we believe in something, we tend to have more excitement and passion. As college students, employees, or supervisors, in any position, billet, or opportunity to collaborate and communicate with others; the more commitment we have, the better we will perform.

Lifelong learning isn't something that is accomplished overnight. It is something that must be groomed, practiced, and consistently worked on. Cramming and trying to memorize information in a short period of time is not as effective as continuously learning. From a physiological perspective, "the brain can only build so many neurons each night, so regular, repeated practice is crucial. Practicing bite-sized bits of information or skills regularly allows them to become second nature, freeing up space in our conscious mind and working memory so we can continue building new knowledge" (Newman, 2017, p. 2). This completely goes against the grain of how we are taught in school. In history, for example, we go through a certain period of time, get tested on the material, and then move to a different time period. Rinse, repeat. Towards the middle of the school year, there may be a midterm and then at the end of the year, there may be a cumulative final exam but more times than not, there isn't nearly enough repetition of the material that is taught. The information may be reviewed a couple times for these tested events but it isn't continuously learned therefore is it not being retained long term.

A continuous challenge that teachers have been facing involves the testing of their students. Creating "lifelong learners seems antithetical to the current emphasis in US schools on high-stakes testing, which has increased dramatically in recent years" (Crow, 2006, p. 22). Though tests matter, the attention, focus, and pressure on them do not result in creating a desire to learn. The Principals, staff, administrators, and teachers within "US schools today are under tremendous pressure to produce high scores on standardized tests. The teaching strategies that often result from this pressure, although sometimes motivating students to do well on tests, often do not motivate them to learn" (Crow, 2006, p. 31). Doing well on a test does not equate to learning. This, perhaps, could just be great temporary memorization of material. Performing well on a test is a form of extrinsic motivation and provides temporary results but does not result

in creating lifelong learners. If the habits were built to enforce intrinsic motivation, students would want to do well on their own accord rather than because of someone or something else. A byproduct of this intrinsic motivation would result in higher test scores.

As much as curiosity and intrinsic motivation are important to developing lifelong learning, there must be some rhyme and reason to promoting autonomy in both a classroom and the Marine Corps work environment. Having a sense of choice is important but "implementing a framework of assessment, challenge, support, and accountability encourages new paradigms and thinking, new learning and unlearning, and a commitment to growth and continued lifelong learning with initiative, resourcefulness, and persistence" (Murthy et. al, 2011, p.

27). Assessment doesn't need to be a standardized test but periodic check-ins with some type of tangible measure of accountability are important. Freedom to explore, room to think and grow, and the ability to ask why are all ideas that must be encouraged but structure is still relevant. In order to develop leaders and nurture a culture of leadership behaviors, "a lifelong learning attitude must be nurtured and encouraged by leadership" (Day et. al, 2009, p. 178). As Murthy et. al and Day et. al. discuss, the support is essential to promote lifelong learning. When support is felt by the student or Marine, personal growth takes place.

In order to encourage lifelong learning, the effort starts from the top and trickles down. The policy makers must see the relevance to lifelong learning and incorporate it into the curriculum and the school year. They must coordinate with and enable the states, districts, and schools to adjust in order to best accommodate their students. The Principals and administrators must encourage their teachers to create a positive learning environment within their classrooms. It is essential that "schools and classrooms provide environments that encourage students to develop a lifelong love of learning. These proficiencies are so important to businesses and organizations that many emphasize "continuous improvement," providing training focused on communication, decision-making, critical and creative thinking, building collaborative relationships, and general people skills" (Adams, 2013, p. 7). This shift will take time, require a willingness to be flexible, and potentially create some frustration for parents, students, and teachers, but it will pay off in the long run.

Both primary education and the Marine Corps face similar challenges when it comes to encouraging lifelong learning. Though teachers and leaders would agree that they want their students and Marines to be passionate, motivated, and excited about their education or job, the actions that are being taken would speak otherwise. The focus of our primary education seems to be on testing. The focus of our Marine Corps seems to be on getting the mission accomplished. Both are a "check in the box."

The Effect on Education

The history of education within the United States officially began in 1635 when the Boston Latin Public School was opened. The idea of progressive education began in the late 1800s and by the 1930s, there was a large movement to educate the "child to reach his full potential and actively promote and participate in a democratic society" (The American Board, 2015, p. 1). Though education has officially been around for nearly 400 years, the mindset of a successful education has shifted. Scores on standardized tests, overall grade point average, and what college one gets accepted to or graduates from seems to be more important than actually retaining the knowledge, applying concepts, and becoming a problem solver.

Our society's "strong emphasis on this single exam leads, as we have suggested with other high stakes testing policies, to teaching to the test, to excessive stress, and to the crowding out of intrinsic motivation and autonomy within school learning" (Ryan & Deci, 2020, p.

7). The external pressure that these tests create are unhealthy on a biological, physiological, and mental level. The unfortunate aspect of this pressure is that "although reforms that stress standards, accountability, and sanctions may (or may not) succeed in raising test scores, they are also likely to sabotage a key goal of education - creating a flexible population of life-long learners who can adjust to the changing needs of society and the workplace" (Sheldon & Biddle, 1998, p. 164). There are long term negative impacts on future generations when the holistic picture is not being taken into account. Children are being held back from reaching their full potential. The different methods and means that teachers are using in their classrooms "for motivating children are becoming increasingly extrinsic in the light of the pressure put on teachers in the US to emphasize the type of instruction that will raise test scores, and do not necessarily foster motivation to learn" (Crow, 2006, p. 30). Though the tests matter, lifelong learning should be the goal rather than achieving a certain score. How someone performs on one test has a temporary impact but how they are able to utilize curiosity, intrinsic motivation, autonomy, and lifelong learning to make decisions throughout their life will have lasting effects. The way that children learn in a classroom at six years old has been proven to have an effect on their adulthood motivation, willingness to work hard, confidence, and autonomy.

What initially makes a "good" student a "good" student? The tangibles. The score they earn on a standardized test, the grade point average they earn, how they behave in a classroom and choose to communicate with their teachers and students are all criteria for determining if a student is good or bad. This judgment is quickly made to decide if someone is a "good" student. Based on that judgment, a student will more than likely be treated slightly differently because of the potential they do or do not have. Does it matter if they are curious, intrinsically motivated and are lifelong learners? Absolutely. Do teachers take the time to find out what type of motivation their students have? Whether or not they are curious? Is the student a check in the box or a lifelong learner? If a teacher takes the time to get to know their student, a better picture can be painted when it comes to their performance, true dedication to their education, and future retention desire (continued education). Once their attributes have been identified, a teacher can encourage their student to create lifestyle changing habits that can impact them as a student and the rest of their lives.

There are countless challenges that teachers, parents, and students face when it comes to doing everything possible to instill positive habits for students. Since 2020, new and more unique challenges have been faced when it comes to the education of students. Lifelong learning and building intrinsic motivation are not at the top of the priority list. 3.7 million students graduated high school during the 2018-2019 school year. Since the Coronavirus Disease 2019 (COVID-19) pandemic began in the middle of the 2019-2020 school year, the numbers are not accurate due to the students no longer physically being in a classroom (National Education for Education Statistics, 2022, p. 1). As parents and teachers reacted to the pandemic, the means of educating our children adjusted to remote learning, home schooling, or being unaccounted for. The hands-on learning in a classroom shifted to sitting in front of a device over two years ago. Some students are still learning this way while others are back in school. This is creating a unique and challenging time for students building a foundation in a learning environment.

A recent interview with the Principal at St. Matthew's Catholic School in Bellevue, Nebraska confirmed research that a significant population of students has been affected by the adjustment in teaching that took place during the onset of the COVID-19 pandemic. Her third graders have been impacted the most - the results from the standardized reading tests are significantly lower than the average. As second graders, her students "learn to read" but as third graders, they should "read to learn." Because many of them are still struggling to learn how to read, they are behind as fourth graders. The Principal stated that they are focusing on this group of students but she remains concerned. As a country, primary education fell to the backburner during the onset of the COVID-19 pandemic. Curiosity, intrinsic motivation, and lifelong learning in an autonomy supportive environment were not only irrelevant but the engagement, quality time in the classroom, and focus on learning in general decreased. It is more difficult to instill these attributes through a tablet when compared to engaging with students face to face in a physical classroom.

The Effect on the Marine Corps

The Department of Defense is the country's largest employer and provider of adult education within the United States. Between the military members and civilians, it provides education and training for over 2.9 million personnel. This is an incredible opportunity to positively influence such a large population of the working population in the United States. Though some leaders have the right idea about what it takes to effectively engage their troops, promote lifelong learning, and increase overall performance, it is unfortunately not well known or practiced. This means that a high percentage of the Department of Defense personnel are not performing to their potential. Though every job is important and deserves recognition, it is in the best interest of the American people that the Department of Defense has its best and brightest at the forefront of our nation's defense. There should be a sense of pride, confidence, and strength that comes from the employees who make up this organization.

The Marine Corps was founded November 10, 1775 and it has participated in all wars of the United States. Over time, more structure has been created. There has been a rollercoaster of increases and decreases in the total population and means to educate and reinforce leadership. One challenge that leaders have continually faced is "instilling motivation" in their Marines. Most Marines serve their initial four year contract and then choose to get out. What initially makes a "good" Marine a "good" Marine? The tangibles. The physical and combat fitness test scores, their body composition and how they look in uniform, their haircut, whether or not they completed their required training, and their promotion potential. Judging a book by its cover is how quickly a leader can decide if someone is a "good" Marine. Does it matter if they are curious, intrinsically motivated and are lifelong learners? Absolutely. Do leaders take the time to find out what type of motivation they have? Whether or not they are curious? Are they a check in the box or a lifelong learner type of Marine? If they take the time to get to know their Marine, a better picture can be painted when it comes to their performance, true dedication to the job, and future retention desire. By taking the time to figure this out, they can also do what they can to promote these attributes in order to make them better individuals, Marines, and provide more of a positive impact to the unit's mission.

As stated by the Marine Corps' Commandant in his *Commandant's Planning Guidance*, the Marine Corps needs "a doctrinal publication to formulate how Marines will learn in the years ahead and why it is so important that they *buy into* the concept" (Berger, 2019, p. 17). As the highest ranking Officer in the Marine Corps, it speaks volumes that General Berger sees just how important the buy in is when it comes to learning. When we provide justification, explain the why, promote problem solving, thinking outside the box, and curiosity, there is more potential for a Marine to get personally excited about the subject. Because the Commandant recognizes this importance, it is necessary for the Marine Corps to take actions in order to instill these attributes throughout the organization.

The Army has created a model known as the Army Learning Concept for 2015. It "recognizes the need to enhance student motivation in the learning process if the learning is to be retained and usable in future real-world situations" (Persyn & Polson, 2012, p. 12). This concept is applicable, relevant, and necessary to create long term effects for the Army's population. Because the Army is also the largest branch of service, this recognition in the learning process has such incredible potential to reach so many members within the military. This model's emphasis on motivation and lifelong learning has the ability to influence the other branches within the military. As of today, nothing has been published that has stated whether the model has shown improvements or positive data when it comes to the quality of learning for Soldiers. If and when data is published, the rest of the Department of Defense should mirror this model for its nearly three million personnel if the model is seen as effective within the Army.

A comprehensive study that was conducted by Cyril Houle (known as *The Inquiring Mind*) in 1961 and on the Army Learning Concept of 2015 have confirmed connections between learning and motivation. In order to be successful, "adult education programs must appeal to the needs and interests of students, must connect in a meaningful way to other aspects of the students' lives, and must encourage students to feel responsible for their own learning" (Persyn & Polson, 2012, p. 13). There is a strong correlation between the quality of education to the quality of the instructor. This creates an additional burden of responsibility for teachers and leaders but most teachers and leaders of Marines *choose* their job because they want the opportunity and privilege to positively influence others. The confirmation that a teacher or

leader's action has a lasting and profound impact on how their students and Marines turn out in the long run should encourage them to do any and everything in their power to instill positive attributes and behaviors while they have the ability to impact their futures.

The Marine Corps is structured in a way that doesn't allow complete freedom to choose how to accomplish every task but there can be choice, decision making in the process, and room to explore with many tasks. It's just a matter of communicating and coordinating to work out the details. Because of the structure, it is easy to allow a controlling environment to be the only environment that exists. This often leads to resentment, frustration, and feelings of lack of trust and confidence from leadership. When there is external pressure in a Marine Corps environment, both the Marines and the leaders suffer the consequences. For example, when the mission priority suddenly shifts and all the work that was done is no longer valid or necessary, frustration is felt by the leadership and their Marines because their efforts were a waste of time and were essentially dismissed (even if that wasn't the intent). When the timeline to get the job done suddenly gets shortened and seems nearly impossible, stress levels increase. When assigned a task that a leader doesn't agree with but must carry it out anyway, tension can be felt across the unit. When external pressure is created by superiors, there are second and third order effects that are often unseen and unheard from the Marines getting the job done. This external pressure causes the immediate leader to react and oftentimes, it can be negative. Rather than controlling the negative emotions, it usually gets pushed down to the Marines. It is understandable that some things cannot be controlled in the military - that's the nature of the military and must be accepted. What can make a difference is the leadership explaining the "why" when they create external pressure and an unintended controlling environment. By explaining the "so what" to the big picture, it can fuel the curiosity for the Marines, allow self

reflection in the matter, and if there is effective communication, autonomy can still take place to accomplish the mission.

In the 38th Commandant's Planning Guidance, General Berger discusses education being one of his five priorities through 2030. He argues that "the lack of incentives for selfimprovement through education and personnel development discourages those inclined to learn, think, and innovate – as these tend to disrupt the current model, and may in fact make the individual less competitive for promotion" (Berger, 2019, p. 7). Because the Commandant recognizes that both self improvement (intrinsic motivation and lifelong learning) and innovation (curiosity) are factors that must be addressed in his guidance, it cannot be ignored that they are important attributes to becoming a better Marine. Though this quote is long, it is imperative that General Berger's perspective is appreciated for the future of the Marine Corps' education. General Berger believes that:

There is an increasing dissonance between what we are doing with regard to training and education, and what we need to be doing based on the evolving operating environment. Specifically, many of our schools and training venues are firmly based in the "lecture, memorize facts, regurgitate facts on command" model of industrial age training and education. For our schools, it is more about the process of presenting information, and for our students/trainees, it is about what to think and what to do instead of how to think, decide, and act. What we need is an information age approach that is focused on active, student-centered learning using a problem-posing methodology where our students/trainees are challenged with problems that they tackle as groups in order to learn by doing and also from each other. We have to enable them to think critically, recognize

when change is needed and inculcate a bias for action without waiting to be told what to do. (2019, p. 16)

Similar to the standardized tests and controlling environments in classrooms (often due to external pressure), the Marine Corps is still using powerpoint, lecture, memorization as a means to educate our Marines rather than focusing on problem solving and critical thinking. By promoting curiosity, intrinsic motivation, and teaching in an autonomy-supportive environment, the industrial age learning can become history while the informational age approach makes its way front and center, per the Commandant's goal. Lastly, General Berger states that " The National Defense Strategy has directed us to focus in new areas, and this requires us to think, innovate, and change. Addressing these new missions starts with ideas, ideas are developed into concepts, and concepts that are then tested and refined by wargaming, experimentation, modeling and simulation" (Berger, 2019, p. 17). If we don't provide freedom for our Marines to think outside the box and promote this curiosity we will not be able to effectively "think, innovate, and change." The time is now to make these adjustments in order to increase the readiness of the Marine Corps.

Conclusion

Tangibles for Leadership to Implement at Small Unit Level:

- Encourage Marines to act on **curiosity**. Allow exploration and freedom for Marines to complete assignments and tasks with creativity and innovation.
- Teach and discuss the idea behind **intrinsic motivation**. It comes from within. Encourage Marines to create tangible personal goals during counseling sessions

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and assist them in creating steps in order to reach that goal on their own terms. Let them decide how they will accomplish the goal.

- Create an autonomy-supportive environment rather than a controlling environment. Allow Marines to *choose* when possible. Decrease the amount of micromanaging in order to promote creative thinking, problem solving, and relying on themselves to find the answer.
- Build a positive learning environment. Ensure it is understood that learning is meant to be a lifelong concept not a check in the box for each subject, topic, training event, etc. Lifelong Learning takes place in and out of the work environment it should be desired on an individual level.

Though the Marine Corps has hierarchy, structure, standards, policies, and orders that provide clear guidance on what can and cannot be done within our institution, we also publish Marine Administrative Messages (MARADMINs) that provide clarifying guidance for more current topics such as the COVID vaccine, physical fitness test changes, promotion board timelines, and informal training requirements that need to be take place within a specific period of time. In order to reach the entire population of the Marine Corps, I recommend publishing a MARADMIN pertaining to curiosity, intrinsic motivation, autonomy-supportive teaching environments, and lifelong learning. In this message, the Commandant's remarks from the 38th Commandant's Planning Guidance must be referenced - specifically the fact that one of his top five priorities is on education and training. His desire to promote innovation, self-improvement, and lifelong learning rather than memorization of facts should be included.

In addition, the Marine Innovation Unit should be used as an example for a unit that is utilizing the four discussed attributes to shape the future of the Marine Corps. A background of curiosity, intrinsic motivation, autonomy, and lifelong learning should be explained to provide context. Instructions should be provided in order to implement these attributes throughout all units within the Marine Corps. A powerpoint presentation will be published as a guideline (not as a means to present the information to an audience). All Staff Non-Commissioned Offices (SNCOs) and Officers will be expected to complete the training by a deadline. Once this takes place, the SNCOs and Officers must provide informal training to the NCOs and junior Marines by a second deadline. Once all hands throughout the Marine Corps have been trained on implementing these attributes to their commands, it will become a once per year refresher training and taught in boot camp and Officer Candidate School to all new Marines. If the importance of curiosity, intrinsic motivation, autonomy-supportive teaching environments, and lifelong learning can be discussed as important at the lowest levels, over time, the mindset will begin to shift.

Curiosity, intrinsic motivation, and autonomy-supportive teaching environments can be promoted at all levels within the Marine Corps. The Marine Corps recently created the Marine Innovation Unit because as an institution, we believe that "the Marine Corps has always relied on improvisation and resourcefulness to win battles. The world's most powerful weapon is still the human mind. Our thinkers, innovators, and improvisers will prove decisive during future conflicts" (Marine Innovation Unit, 2022). We are living in a time where innovation, creativity, and thinking outside the box is required in order to stay relevant, current with technological advances, and ahead of our adversaries. The Marine Innovation Unit is a unit that "leverages existing Marine talent to address advanced technology challenges in order to accelerate the development of new capabilities" and to "accelerate advanced technology development for the Marine Corps" (Marine Innovation Unit, 2022). This is a competitive unit to become a part of. A Marine must have an intrinsic motivation to apply, get screened, and selected to be a part of it. Once they become a part of this unit, they work in an autonomy-supportive environment to promote the idea of choosing how to create new and innovative ways of accomplishing our mission. Because the Marine Innovation Unit is promoting curiosity, it can and should be promoted across the force and referenced in the MARADMIN to reiterate the fact that the attributes are already being encouraged in one unit. The time is now to encourage it across the entire fleet of the Marine Corps.

How can curiosity physically be implemented at the lowest levels? Though this sounds simple, it is as easy as it sounds. Allow Marines (at all levels) to ask the question "Why?" As an institution, we pride ourselves on the hierarchy of the Marine Corps. We appreciate that ranks mean something. We understand that with rank comes experience, time, and climbing up from the trenches. As we climb higher, we sometimes lose perspective on what it was like to be a younger, more junior Marine. We lose patience. We lose understanding. We don't think we need to explain ourselves because they have little experience and don't "need to know" the details of their task. Because we, as humans, appreciate the reason behind why we have to do things, we should explain ourselves (when possible). In a wartime situation when time is of the essence, questions cannot always be asked. In peacetime, we should provide learning opportunities when we assign tasks. At least once a week, we should have informal discussions on our way ahead. We should provide opportunities to all of our Marines to provide their perspective and ideas on how we can improve or do things differently. When we provide these opportunities, we must treat our Marines fairly, with respect, and with patience. We should not crush their spirits, shut down their thoughts right away, or insult them. There will be good ideas. When they are shared, implement those ideas and see how things change. If it improves

the command, praise the Marine in front of the unit and highlight the importance of curiosity. This positive attention will encourage others to practice curiosity. In addition, these ideas can help the unit accomplish its mission in a potentially more efficient manner.

How can intrinsic motivation be implemented at the lowest levels? The Marine Corps is an organization that provides a lot of extrinsic motivation when it comes to getting the job done. If it has been a tough work week and the Marines have clearly worked hard, leadership will allow early liberty on Fridays. Leaving work at noon instead of at five in the afternoon on a Friday is something that Marines will work harder for. If someone goes above and beyond at a certain unit for the two to three years that they are a part of the unit, they will sometimes get officially recognized by the Marine Corps in the form of an award. This award becomes a part of their official military personnel file and is a permanent part of their record. If Marines want the recognition, they will work harder. In order to implement intrinsic motivation, leadership must provide a certain number of hours from the work week to "work on themselves."

As a counseling requirement, goals should be established for all Marines - both personally and professionally. The goals should tie in to the hours that they get to work on themselves. For example, a Marine's personal goal may be to "volunteer 40 hours within three months." In order to help them reach that goal, provide the Marine with two hours per week to dedicate to volunteering. There, of course, must be some means to verify, validate, and show proof of how they are working on themselves but the idea is that they are encouraged to pursue their goals without time being in the way to help them achieve it. There is a small sense of extrinsic motivation because of the time that is allowed but it is such a small factor that it isn't relevant in this case. Over time, the Marines should see that this time that they are given to work on themselves is not enough. The goal is that they start giving up more personal time in order to continue pursuing these goals. Instead of spending just two hours per week on volunteering, maybe they dedicate another three hours of their personal time. In the long run, the idea is that the Marine will increase their intrinsic motivation without even realizing it.

How can autonomy-supportive environments be implemented at the lowest levels? During the weekly field day formations, SNCOs tend to get involved when it comes to supervision of the cleaning. They often hover, micromanage, and essentially get in the way of Non-Commissioned Officers (NCOs) running the show. Though it is important to ensure that the bachelor enlisted quarters are cleaned in an orderly fashion, we could create an autonomysupportive environment by allowing the NCOs to be in charge. The SNCOs can provide initial guidance and expectations before the field day begins but then provide complete freedom to the NCOs to complete the task. There are some units that implement this type of practice but more times than not, the SNCOs get involved before the field day formation is over and it quickly becomes a controlling environment. Another way that an autonomy-supportive environment can be created is to flip the roles for training requirements. For the most part, it is SNCOs and Officers who take charge for most training events. Oftentimes, the younger and more junior Marines just show up and are told what to do and how to do it. Rather than do what is expected and not enjoyed, at least once per quarter, an opportunity should be provided to the junior Marines to be in charge of a training event from start to finish. They would have complete autonomy over the timeline, presentation style, venue, method of teaching, etc. The only requirement would be to inform the NCOs of their plan, create some type of product for the NCOs to review (agenda, powerpoint presentation, script, etc.) and do a run through or rehearsal of the training event in front of the NCOs to ensure it is presentable and appropriate for the entire unit. This unique training event provides an opportunity for the junior Marines to have

perspective on their leadership's role. This perspective provides an appreciation, understanding, and buy-in to how and why certain things are done the way they are in the Marine Corps. Over time, they will become better at putting these training packages together, learn what it takes to step up to leadership roles, and be a better follower when necessary.

The above guidance is not meant to be an end all, be all for implementing these attributes across the Marine Corps. Think of this as a starting point. How can we promote curiosity at our level? In what ways can intrinsic motivation be encouraged at the lowest levels? Though our hierarchy can seem rigid, what room do we have to create an autonomy-supportive environment for our Marines? There is no wrong answer to encourage these because we, as leaders, must practice these as well. Lifelong learning can be something we all strive for and seek for ourselves and our Marines. It will benefit us as leaders and the Marine Corps as an institution.

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