

Signature Assignment: Action Plan

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Introduction

I have always dreamed of becoming a teacher and so have given thought to how I would teach since I was in about 1st grade. In every class I've taken, I have critiqued and admired various ways in which my teachers have taught me. Because of this, I have developed as a teacher greatly. Through my undergraduate courses at Azusa Pacific University, and now through the work and self-analysis I have done in my credential courses, I have learned more about myself as an individual and as an educator. My recent work as a substitute teacher at Bethany Christian Elementary and Middle School in Sierra Madre has given me similar insight and opportunity to critique my own work in teaching. Teaching is a calling and I am confident that God has given me the gifts, talents, and circumstances needed to succeed in the world of education. Particularly, I believe He has prepared me to be a teacher at a private elementary school in a suburban area with a small class, but one full of students with a wide range of abilities and needs. Having been homeschooled from kindergarten through 8th grade, I desire to teach in a similarly individualized way. I would love to be in a school where I feel close enough to my students, and have few enough of them, to the point it is like I am homeschooling them and giving them all the tools they need to succeed in what they need and want to do in life. Bethany Christian has similar demographics to my ideal as they have 102 kindergarten through 8th grade students with one being an English language learner and nine being special needs. Having this goal in mind, I hope to teach all subjects in 5th or 6th grade and perhaps teach an advanced math class for students gifted in that area. With this goal in mind, I seek to better myself as a teacher through self-analysis, growth, and planning, as discussed in the sections below.

Self-Development Plan

Every person has a unique brain that works and learns in a unique set of ways. Thus, there is no one-size-fits all model in teaching, meaning that knowing the different learning styles and teaching to all of them becomes a key part of being a successful teacher. After all, the teacher's funds of knowledge is the element needed to comprehensively use pedagogical knowledge in order to be an exceptional teacher (Moll, 2015). While culture and family background are the major players in the funds of knowledge, knowing about each student's brain, personality, and their overall learning styles is a crucial piece as well when deciding how to teach. It is also important for teachers to understand their own learning styles so that they can continue to improve themselves as well as see how their own tendencies and styles influence the way they teach even when they are not conscious of it. Thus, I took five different self-assessments to discover these things about myself.

I discovered through the PersonalityMax test that I am an INFJ (Introversion, Intuition, Feeling and Judging), which are nicknamed Sages. The information about sages that the website gave me was quite interesting, and though initially I didn't think I agreed with their findings about me, after reading further, I think I do sound a lot like a Sage. The site says that INFJs direct energy inward, are independent and deliberate, and that empathy, warmth, and care are some of the main characteristics that fuel Sages (PersonalityMax, 2021). I have always much preferred deep relationships with only a few people that are based on shared values and intimate conversations and connections, just as the site said I do. It was insightful to see my personality spelled out so accurately.

Through the Keirsey temperament test, I discovered that I am considered a Guardian. Among the many keywords the website uses to describe Guardians, I resonate most with

respectable, law-abiding, concerned, and logistical as I have been given those adjectives by peers many times before. I learned that guardians are typically loyal friends, responsible parents, and stabilizing leaders (Keirse, 2023). It was nice to receive that vote of confidence as that is exactly what I strive for in those various areas of my life.

According to the learning style assessment on How-to-study.com, I am a visual learner. This did not surprise me as I have always considered myself such. I always prefer to see things and learn better when I read things than when I am only listening to information. It is suggested that those who learn this way should picture new words they are hearing, should draw in their notes, and should watch videos about what they are learning (How-to-study, 2023). Of course, I, like all visual learners, do not only learn by seeing. I learn in every way, but knowing that my brain learns best when visual stimulation is a part of the process is helpful.

Through the Psychology Today multiple-intelligence assessment, I learned that I have interpersonal intelligence. According to the web page, this intelligence includes the ability to discern the moods, temperaments, dispositions, motivations, and desires of others and the ability to respond appropriately (Sussex, 2023). I fully agree with this description of myself as I have taken other tests that say the same thing and I have always found it to be true when self-reflecting. I feel what others feel and I typically notice even the smallest gesture or change in facial expression. This is helpful in that it guides how I interact with and help those I come in contact with, but it can also make me overthink things and think I am receiving messages that were never sent.

According to the emotional intelligence test on the Last Eight Percent website, I have a high EQ. This means that my level of EQ has probably been and will continue to be a driver of my high performance under pressure (IHHP, 2023). However, the analysis it gave me did suggest

that I take time every so often to think about what brings me the greatest meaning in my life so that I don't find myself sinking under trivial pressures (IHHP, 2023). I agree with the test's conclusion that I have high emotional intelligence because I find myself to be very cognizant of my own thoughts and feelings as well as the thoughts and feelings of others, as addressed above in the discussion on my interpersonal skills. I also agree with the reminder they gave me because I do find my emotional and mental health to struggle more when I give too much energy to the details and not enough to the big picture of my life, but I will address that more later.

Reflecting Upon the Results

After taking all the above self-assessments, I rediscovered my strengths and weaknesses. I am insightful and have good communication and organization skills, but I am drained by being around people too much and I learn mostly visually and thus do not have as much personal experience with other types. Similarly, I can just generally say that by having the strengths and labels each test gave me, I know that I am not as strong in the other labels they could have given me. I do not need to be an expert in all areas, but knowing that by being who I am, I am not someone else, as obvious as that sounds, is an important concept to remember as a teacher. I am teaching a room full of people who are not me. They are each their own individuals with their own unique brains and learning styles.

Knowing all that I now do about how I learn, I can use that information as I teach students who learn differently than I do. For example, as a visual learner, I will remember that while some of my students will match me in that, many will have different preferred styles of learning. Thus, I will need to teach the way my students need to be taught, and not just the way that I would like to be taught. In addition, having interpersonal intelligence helps me be an earpiece and good mediator for students and others (Sussex, 2023). As a teacher, this is

significant as a teacher needs to have the trust and respect of all his/her students and needs to be able to control the class as a whole well.

Using the Results Personally and Professionally

I already knew it to be true that keeping the real meaning of my life as my focus would make my life better, but to hear it from a secular source was reassuring in a nice way. My purpose and the meaning of my life is found in Christ and my relationship with Him. When I am not daily spending time in His word and in conversation with God, I don't feel nearly as mentally and emotionally strong and stable as when I am. Seeing that I have a high emotional intelligence, but that even still I need a central focus in my life, I am further motivated to keep my center in Christ and not let other things get in my way or weigh me down.

Along a different line, seeing that I am a visual learner, that I have an INFJ personality, and that I am a Guardian gives me motivation to work harder as a runner, as a creator, and as a daughter, sibling, and girlfriend. As a creator, I believe that I can use my visual learning to learn how to paint and sew and design things by looking at what other's make rather than by reading about skills I can use. I am already creating in this way, and I see a little more now why. As a daughter and sibling, my intuition and feeling nature allow me to live well in my house with respect and care for my family around me. As a girlfriend who will someday be a wife and mother, I will use my strengths as a Guardian to be loyal and faithful to my boyfriend/husband and responsible in my role as a parent to my children.

Of course, in addition to influencing my personal life, what I learned about myself through these self-assessments will impact my professional life as well. Being a visual learner, as a professional, I should take time to learn more about the other learning styles so that I can determine what my students need from me in those areas I am less comfortable. I know now that

I need to pay more attention to including activities and forms of communicating information in my lesson plans that are more friendly to other types of learners.

Furthermore, as a Guardian, I have the strength of being a stabilizing leader (Keirse, 2023). This is key as a teacher since children need to be able to trust and think highly of their teacher in order to learn well from said teacher. Knowing that this is a strength, however, does not give me license not to continue to grow in this area and actively seek being that kind of leader for my students. It will still take intentional effort, just as it will take intentional effort to grow in my areas of weakness like those that come with being an introvert who will be around a lot of people every day. I will have to fill my cup in the ways I need, like through the reading of scripture, prayer, and time with family.

In conclusion, through the discovery I was afforded by taking these various self-assessments, I learned my strengths and weaknesses and was able to translate that to my role as a teacher. I hope and plan to continue to learn about myself and grow in whatever ways I can for the sake of becoming the best teacher I can be. My students need me to be the best and if I can give that to them, it is my responsibility to do so.

Student Development Plan

The ways and rates at which students develop, especially mentally, is an important part of how and how quickly they will learn. We know that “the brain physically grows through challenge and stretch, expanding its ability to do more complex thinking and learning” (Hammond, 2015, p. 48). All brains have the ability to learn, but it takes the right amount and kind of challenge and stretch to achieve the goals the student, parents, or teacher set. In my own classroom, I will need to keep this in mind as I seek to help students where they are at

developmentally through UDL that supports all the various learning styles represented in students I have.

Child Development

Two students of the exact same age with the exact same educational background may still be in very different places developmentally. Piaget explains that there are four levels of development ranging from the sensory-motor stage to the formal operational stage (Sprouts, 2018). In each phase, new levels of understanding about how the world works are reached by the individual. These levels are not all reached at the same time in a child's life, however. Some children take longer to grasp concepts that were understood by their peers long before.

In the midst of developing, “the brain seeks to minimize social threats and maximize opportunities to connect with others in community” (Hammond, 2015, p. 46). If a student feels threatened by their teacher or if they even just don't have trust in their teacher, their brain will not be as willing to learn. Even if this is at an unconscious level, it is still detrimental. Teachers, thus, should seek to build trusting relationships with their students. After all, “Trust between teachers and students is the affective glue that binds educational relationships together” (Hammond, 2015, p. 72).

Educational Topics

The educational topics as well as the means of communication can greatly affect each student's ability to learn new information. For example, stress is really bad for the brain and dramatically affects how much information can be retained when learning (Medina, 2008). However, “we can retrain the brain to focus on the good things in life” (Leaf, 2019, p. 27). Certain topics or means of giving information can give students stress. Just the idea of doing a timed math facts page starts shutting down some students' brains while, at the same time, it

invigorates others. Teachers have learned that they need to work to mitigate the amount and the effects of stress in their students.

The Universal Design for Learning helps ensure that each student receives an education that best suits their needs, in part by limiting this kind of unnecessary stress. The Universal Design for Learning (UDL) is essentially the offering of choices to students. It seeks to engage students in ways that are effective for individual tastes and it provides many means of communication of information from teacher to student (ie. print, video, ebook, etc.) and of the understanding of information from student to teacher (ie. presentation, report, project, test, etc.). In short, when options like these are given, more students are likely to succeed because they will choose the path that brings them the least stress. Of course there are certain topics and tasks that all students will have to do regardless of the stress it causes them, and it is a different situation entirely to help students work through the stress they will inevitably face, but there are ways to teach that help students learn without stress. My dad, a teacher of 25 years, believes that students should learn with as little stress as possible and then be tested with a level of stress involved. This gives a true test of how well the student has grasped the material to the point of application. I agree with this opinion because life will certainly not be stress free and we need to prepare students for the real world. However, the other side of this, the learning without stress, is how I wish to focus my use of UDL.

Learning Styles

When formulating a UDL plan for my classroom, I will need to pay close attention to the learning styles represented amongst my students. In this respect, in many ways at least, I am like many of my students. For instance, I am a guardian, I am a visual learner, and I have a high emotional intelligence. However, there are many other learning styles, intelligences, and

personalities represented amongst my students. For example, while I am intrapersonal, many are interpersonal. While I am an introvert, some are extroverts, and there are several who have auditory or tactile learning styles. If I taught only in a way amenable to those who are like me in these areas, I would be missing the target for many of my students.

Some specific examples of how the above knowledge may influence my teaching choices come to mind. First, instead of relying solely on visual aids when teaching spelling or science concepts, I would also spell words aloud and offer verbal and written explanations of diagrams. Research says that for a thought to be fully processed, it has to go through each of the seven stages or areas of thinking, but that each person moves through these stages in different orders and at different speeds (Leaf, 2019). If a teacher can provide information to stimulate the different stages then it is more likely that more students will grasp the information faster. Thus, also, instead of solely teaching the formulas and steps for math problems, I would show the inner workings and the reasoning behind the steps so those who learn better with each can both be taken care of.

Conclusion

Considering all the aforementioned ideas, it is important to remember, as a teacher, that not every student has the same brain. In fact, no two students have the same brain. Teaching should be flexible and designed in a way that will help every student succeed in learning. By using concepts of UDL and by selecting educational topics and means of communication tailored to the set of students I have, I can ensure that I am doing my part in transforming the lives of every child that walks into my classroom. As this, of course, is the goal, so also will this be my means.

Common Core Lesson Plan Summary

I have created a common core lesson plan, which is included in the appendix, that helps demonstrate the implementation of the points and topics previously discussed. It is a fifth grade math lesson on prime factorization that takes into account the results shared previously that show the strengths and weaknesses of my students. The objective is that, by the end of the lesson, students will individually and successfully write 4 of the 5 given different numbers in the range of 2-50 as a product of its prime factors and that they will have correctly used the necessary math terms aloud in working throughout the lesson. The first activity is for students to, as they walk in and sit down, write at least six prime numbers down and then check their numbers with their group. The teacher will then introduce the topic before moving to explanations of what prime factorization is and giving examples. As the teacher moves through examples, she will ask for more and more input and help from the class. Cold calling for answers to each step of the later examples will help check for understanding. The individual activity will be for students to choose 5 numbers in the range of 2-50. They will then work independently on breaking those numbers down through prime factorization. They will also write down definitions of *factor* and *prime* in their own words. The lesson will close with the teacher connecting to how what they learned will help them in the future. This lesson takes into account the various needs and skill levels of the various learners in the classroom. For example, using the tree method for prime factorization should help all the visual learners that I have in the class. Furthermore, having students choose what numbers they will break down for the independent practice allows those who get it to challenge themselves and allows students who are struggling to choose numbers they are more comfortable with. For EL students, it would be good to write out things like $2 \times 2 \times 2 = 8$ on the board. Other students may need the use of manipulatives.

Reflection

This process of self analysis and evaluation of teaching philosophies based on neuroscience has helped prepare me to be a teacher in ways I didn't necessarily think I required. Based on what I discovered, I have concluded that being a good teacher is not something you stop working towards once you get the job. It is something you continue to work on every year of the career. Research on teaching strategies and neuroscience can help with this. Receiving feedback from other teachers helps as well.

Reflection on the Feedback on the Lesson Plan

For instance, it helped me when I sought out feedback on my lesson plan in the appendix from a current 6th grade teacher. She suggested that instead of having students write prime numbers in the anticipatory set, I should have them circle prime numbers from a list. I think that it would be good to have this as an option for those who need it perhaps, but I hope to be teaching this lesson at a time when almost every student is very comfortable with prime numbers and won't have an issue writing them from scratch. She also suggested that I make note of whether I want my groups to be homogeneous or heterogeneous and that I provide those who need it with a multiplication chart. I agree that both ideas may be helpful. My peers also made comments on my lesson plan saying that it was well designed for visual learners as well as others and that it was differentiated for EL students. They also commented that the objectives were clear and appropriate for the grade level.

Reflection on Neuroscience Discoveries

Through this process of learning so much about the brain I agree that neuroscience should affect how we teach. One specific piece of this is that it is important for schools to teach mental health literacy to students, teachers, and parents (Smith, 2017). When we all know how the brain

influences how students think and learn, as discussed above, and how they behave and feel, we can use that knowledge for the betterment and even protection of our students' lives. How we teach is inherently connected to why we teach. If we are teaching in order to give our students the tools and skills they need to be successful human beings, then we will teach in a way that listens to the neuroscience research that clearly shows the difference amongst students and the need for teaching students how the brain affects learning and emotion.

Reflection for My Future

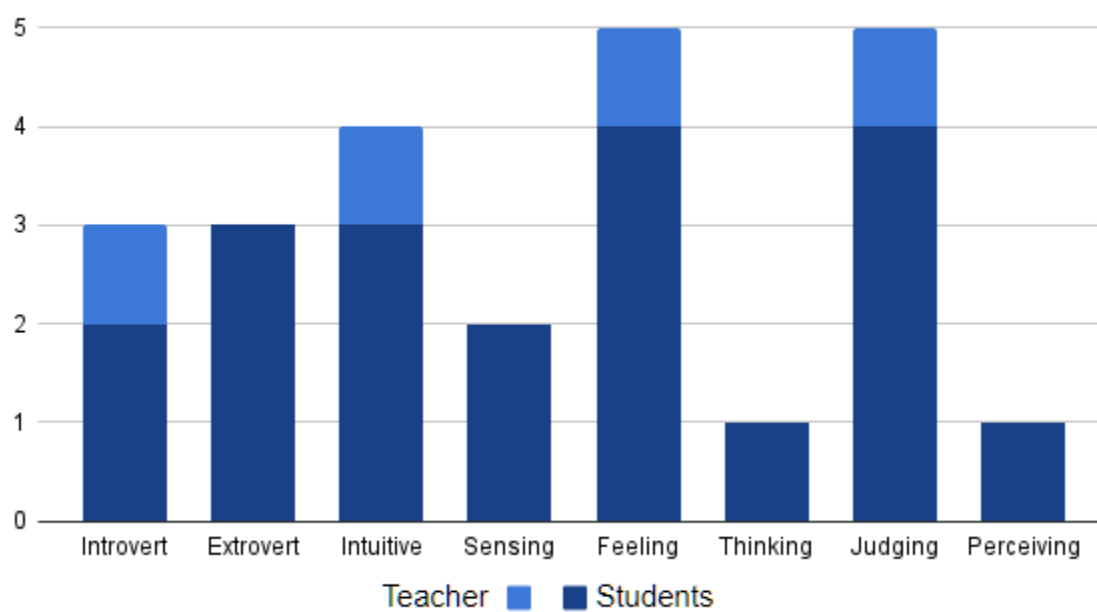
As I continue on my journey of becoming a teacher, and even as I am in that role someday, it will be helpful to remember that I am self-disciplined, but only to a point. I prefer to work alone and to get things done in my own way and on my own time. However, I work best in this way if there are certain boundaries, like deadlines and due dates, put in place to keep my priorities in line. Having the structure of a school year and standards with which to comply will be just what I need as motivation to stay on task and efficient in my instruction and planning. Reminding myself daily that it is God who has called me to be a teacher will also give me the motivation needed to continue to put my best effort into what I am doing. Teaching is a continual struggle, but with the right balance of rejuvenation and motivation I can thrive in the role.

Conclusion

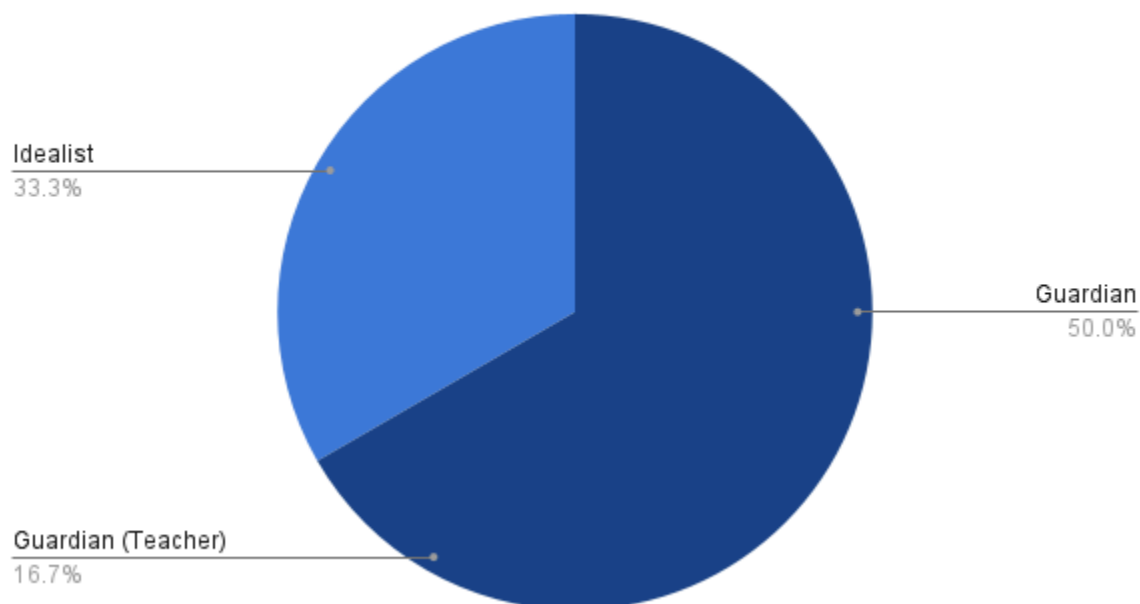
God is continuing to prepare me for my role as a teacher and this in part comes through his gifts of retrospect and reflection. Self reflection on the past and present and applying both that and outside knowledge of students, curriculum, and neuroscience to future goals and planning is a necessary part of being a successful and outstanding teacher. When the time comes for me to take my place in the world of teaching, I know that God will give me the confidence and ability, through His equipping, to be worthy of the calling.

Appendix A

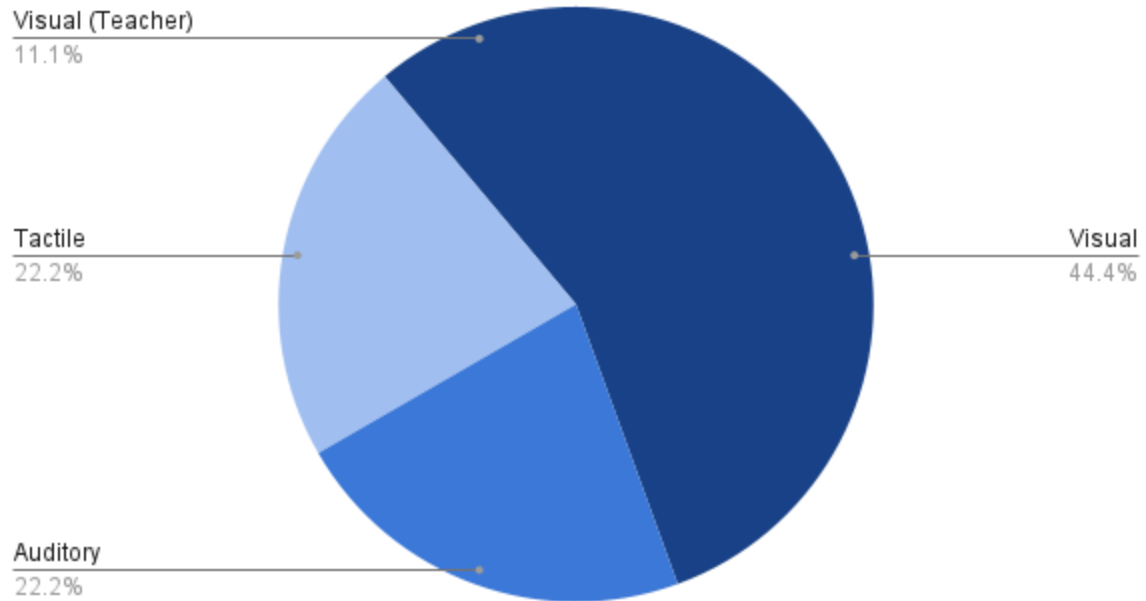
Personality Type



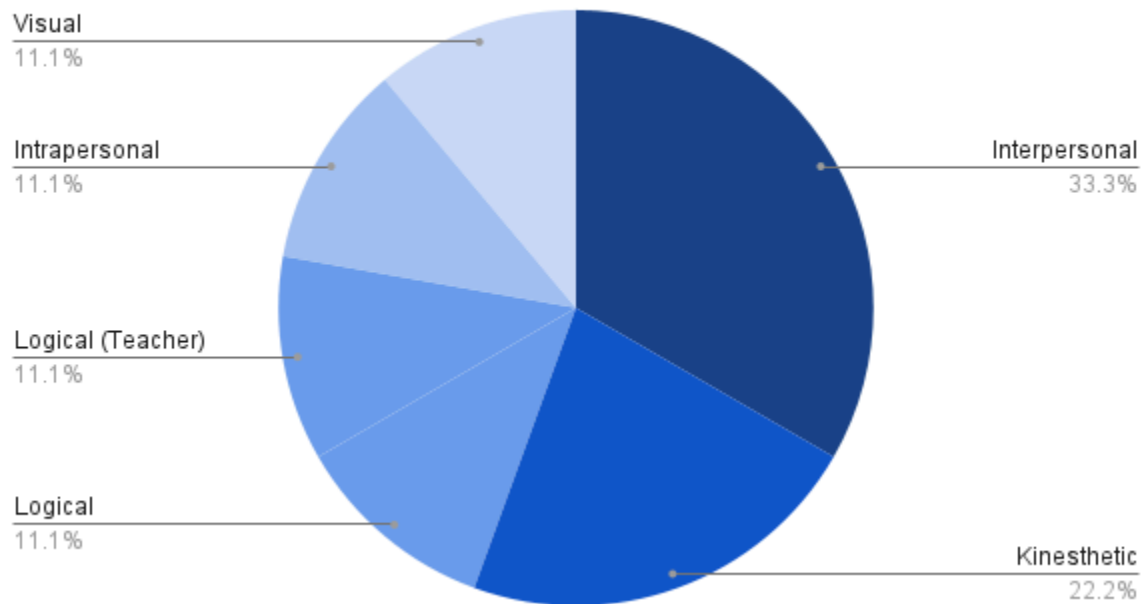
Temperament



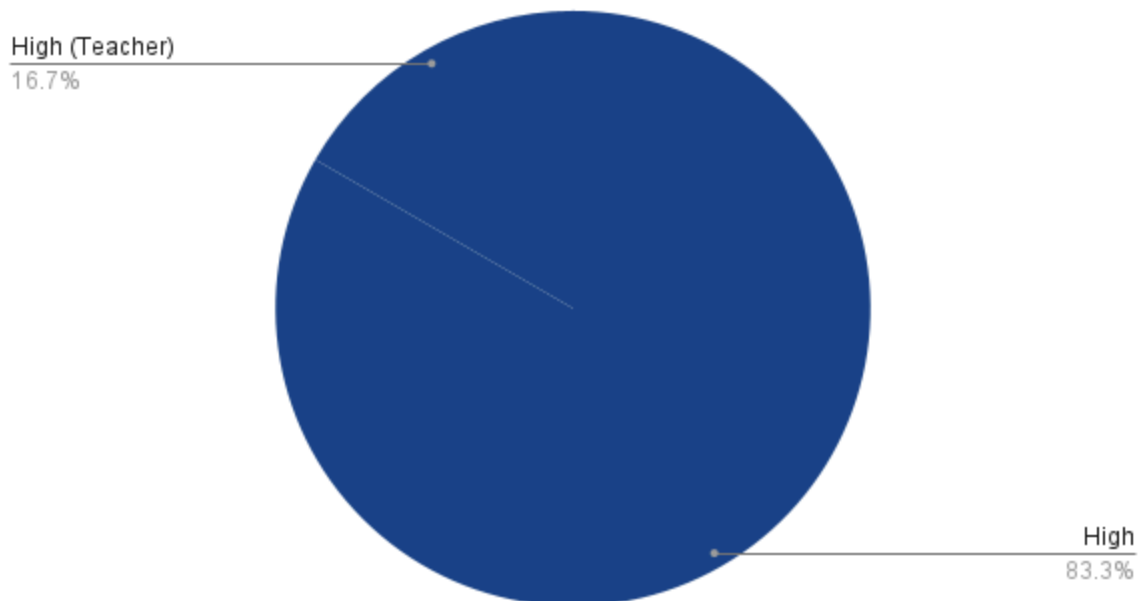
Learning Styles



Multiple Intelligence



Emotional Intelligence



Appendix B

Common Core Lesson Plan Overview	
Lesson Prepared By	Molly Hake
Grade and Content Area	5th Grade Math
Academic Content Standard/s (California Curriculum Frameworks/Common Core Standards)	2.1 Express a whole number in the range 2–50 as a product of its prime factors. For example, find the prime factors of 24 and express 24 as $2 \times 2 \times 2 \times 3$. CA
ELD Standard	Part 1: C.12. Selecting and applying varied and precise vocabulary and other language resources

<p>Lesson Objectives (Write in clear, specific, measurable terms what students will be able to do/demonstrate by the end of your lesson.)</p>	<p>By the end of the lesson, students will individually and successfully write 4 of the 5 given different numbers in the range of 2-50 as a product of its prime factors.</p> <p>By the end of the lesson, students will write their own definitions for the words factor and prime with no contradictions to the mathematical terms and will have correctly used the terms aloud throughout the lesson.</p>
<p>Assessment (This is what students will do to demonstrate mastery and to what extent - Describe how you will assess all students. learning. Include diagnostic, formative, and/or summative assessment tools. Tools may include, rubrics, tests created in a document or a variety of other diagnostic tools.)</p>	<p><u>Diagnostic</u> As students walk in, the Do-Now will be to write down at least 6 different prime numbers. They will then share their answers with their group and refine their list as necessary. The teacher will ask each group for examples that they came up with.</p> <p><u>Formative</u> During the We-Do, the instructor will cold call students to give one of the prime factors of the number the class is breaking down. This will be a chance to check for an understanding and appropriate use of the vocabulary terms as well.</p> <p><u>Summative</u> The final activity in the You-Do in which students break down 5 numbers and write their own definitions of <i>factor</i> and <i>prime</i> will be collected and checked as the summative assessment.</p>
<p>Lesson Summary (State the purpose of the lesson. Describe how this lesson fits into the general context of what you're teaching. Is this the first lesson in a unit, in the middle or at the end of a unit).)</p>	<p>This lesson will take place after the teaching of prime numbers and of factors in general. So neither of these words/concepts will be new. To link the lesson to further learning, the teacher can mention that later, when they are looking at problems that ask for the cubed root of 125, they will need to be able to break down that number to its prime factors to solve it.</p>

Time Allotment and Context approximate length lesson will take	30-40 minutes on one day
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Common Core Lesson Plan: Prime Factorization		
Anticipatory Set/Engagement (How will you capture students' attention and focus learning for the lesson?)	<p>As students walk in, the Do-Now will be to write down at least 6 different prime numbers. They will then share their answers with their group and refine their list as necessary. The teacher will ask each group for examples that they came up with.</p> <p>The teacher will say that today, the class will be making Christmas trees with numbers! We're going to start with a big number and break it down into factors and then break those factors into factors until we have only prime numbers listed at the bottom of the tree.</p>	
Input (Describe how you will explain each new concept/skill.)	<u>Teacher Activities</u> Concepts will be taught by example after example and by talking through each step and making connections between prior knowledge and each piece of the new knowledge.	<u>Student Activities</u> Students will observe and ask/answer general concept and refresher questions as necessary.
Modeling- "I Do" (How <u>will you</u> model/show/demonstrate the concept?)	Continue this theme of the tree and demonstrate it by breaking down the number 8. First, it becomes 4 times 2. Then it becomes 2 times 2 times 2.	
Guided Practice- "We Do" (What will students do to practice the new skill or develop the concept <u>with the guidance of the teacher?</u>)	Give more examples like the one above, but ask for more student input and ask them to write it on their own papers as they go. Ask for answers to small steps of the question. Thus they are doing the work, but you are still reminding them what that work is.	

	Set the students free to do a few as a group so they can rely on each other.
Check for Understanding (How will you check to see if students are grasping the concept? NOTE: this needs to be done throughout the lesson and you should aim for at least 80% of the students to “get it”.)	Through the course of the We Do, most if not all students will be called upon. Then, as the groups work, walk around the room and listen and look for proof of understanding of both the steps of prime factorization as well as of the vocabulary.
Independent Practice- “You Do” (What will students do <u>independently</u> to demonstrate understanding of the standards addressed in this lesson?)	Ask students to pull out a paper and write down 5 numbers in the range of 2-50 (at least 2 need to be numbers not yet done). Then have them work individually on breaking those numbers down and turn it in to you when they are done. Also on this sheet students will write definitions of factor and prime in their own words.
Closure (What will you say to conclude/summarize the lesson?)	This could be where the teacher mentions how they will need this skill when they are given problems like the cubed root of 125. Remind them that we continue to break the number down until we can’t do any more.
Student Grouping (Describe how students will be grouped for this lesson. Include size of groupings; how and <u>why</u> groups will be formed; and instructions for how students will perform the grouped task – step by step.)	Groups of 3-4 will be used in the opening and in the second half of the we-do so that students can use each other’s help and knowledge rather than floundering on their own or demanding more attention than is possible from the teacher.
Differentiated Instruction (Describe in your lesson, specific strategies that you will include to help students with special needs (i.e., Special Education students, English learners, students at-risk of failing, and gifted learners) meet or exceed the standard(s) addressed in your lesson.)	Using the tree method for prime factorization should help all the visual learners that I have in the class. Having students choose what numbers they will break down for the independent practice allows gifted students to challenge themselves and allows students who are struggling to choose numbers they are more comfortable with. If students would like, they can do problems with numbers larger than 50.

	<p>For ELs, it would be good to write the words prime and factor on the board and take a moment when walking around to check that they remember what those words mean. It could also be good to write out things like $2 \times 2 \times 2 = 8$ instead of just saying it based on the tree. Thankfully, this is a very number heavy and language light lesson. Instead of writing the definitions in their own words, it may be beneficial for them to come to your desk and tell you aloud.</p> <p>For special ed students, it might be necessary to give them a little more individual attention during the second half of the we-do and during the independent practice time. They may also need a calculator.</p>
Materials/Resources and Technology/Resources	<p>A white board and a marker is pretty much all you'll need. Each student will also need paper and pencil.</p> <p>Manipulatives like the little plastic bears may be needed for some students who struggle with the concepts of multiplication and division.</p>

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