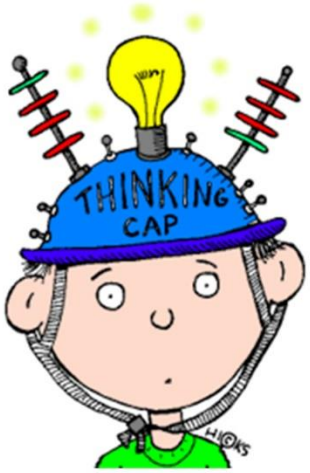
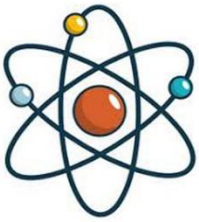


5 SECRETS

To Unleashing Students' Learning POTENTIAL

in the Classroom & Beyond



By Dion & Debbie Flaming

ABOUT THE AUTHORS

Dion and Debbie Flaming are educators with over 50 years of combined experience in the classroom as teachers and in administration. They are the founders of Brain Buster 3D, which markets 3D pen kits at reduced prices for schools and they have written “Jump Start” learning guides for teachers and students with illustrated step by step S.T.E.A.M. (Science, Technology, Engineering, Art and Math) projects using 3D pens. Many schools are investing in 3D printers which can be expensive and can involve a steep learning curve for teachers and students. 3D pens can help fill the gap and provide a way of individualizing 3D projects and prepare students for more complex tasks. Teachers who use 3D pens in their classrooms have found that their students display an increase in engagement and focus as they learn by doing. A huge benefit is that the student’s creativity, imagination, problem-solving skills will develop as they gain skill in using a 3D pen. Because the 3D pen is considered by students a fun and engaging tool, teachers find the concepts they are teaching are more easily understood and effective. Taking 2D concepts and creating 3D reality makes ideas, designs and plans come to life.

A WORD FROM THE AUTHORS: Motivating students to make that intrinsic desire to learn is every teacher’s dream come true. In this book we share the five best secrets which we found were the winning motivational formula master teachers used to successfully motivate their students to reach their learning potential.

- You will be given access to survey's and inventories that the best teachers use to find out essential information about the learning style and interests of their students.

- You will get a sneak-peak into the educational challenges coming in the future and what you can do to help your students not only prepare but thrive in the world of work that is to come.

- Best of all, you will be given ideas you can implement that will help you make powerful, relational connections with your students.

INTRODUCTION

All of us have encountered teachers or watched movies featuring teachers who have a way of relating to their students which captivates and inspires curiosity and rich learning experiences for their students. In this book, you will be given a look into ideas and techniques of the most effective instructors so that you will be able to apply their secrets with your own students.

This book will provide you with easy to do, quick to implement, effective tools and techniques which make it possible for you to unleash your student's learning potential in a way you never thought possible.

If you apply just one secret, it will change the way you think about your student's potential for success, and their life will forever be impacted by your decision to become the effective instructor you always wanted to be.

Your influence cannot be under-estimated. **Use these secrets to impact your student's educational destiny to be more than they would have ever dared to hope and give them the confidence to grow up to be a world changer!**

BEFORE you read the Five SECRETS take the TRUE OR FALSE TEST:

1. I believe all my students have gifts and talents. True or False
2. My students have unique learning style and I know what they are. True or False
3. My students are encouraged to explore their own interests. True or False
4. My students are free to learn from their mistakes. True or False
5. My classroom has a well-stocked, creative learning space. True or False

SECRET #1

Are you aware that every child is extremely gifted and talented in one thing or another? If you answered TRUE or FALSE to question number one, you are right. Your perception about your students will either help them realize the gifts and talents within them or will hinder them from this amazing discovery!

The idea that the expectation of an influential adult such as a parent or teacher can have on helping or hindering a child's learning potential is backed by research. A study was conducted in 1968 and is still referred to in teacher colleges today. The study was done by researchers Rosenthal and Jacobson called, Pygmalion in the Classroom. This study is one of the first to provide overwhelming evidence that teacher expectations can significantly affect student achievement. The researchers gave teachers false information about the intelligence results of select students and indicated that a certain group of students were gifted and talented and on the brink of rapid intellectual growth even though the students were average or below average. The findings were startling. **Those students whom teachers thought were gifted and talented and the teacher expected to perform at higher levels showed significant gains in intellectual growth when compared to their classmates at the end of the year.**

Many subsequent studies have since supported the general findings of the original 1968 study. Isn't that amazing? When a teacher believed a student was smarter, the student believed it too and met that higher expectation. Think about the impact of a teacher who is critical and belittling to a student. What will the student believe about their own intelligence? I am not smart, and I am not capable. If you perceive your students as gifted and talented, it totally changes how you approach learning situations. Students are like seeds, filled with limitless potential. Apply the right amount of sunlight, water and soil and they will grow. Keep reading to find how you can provide the right conditions to get the germination process going for the seeds of potential within your students.

SECRET #1 PERCIEVE YOUR STUDENTS AS A GIFTED AND TALENTED AND IT WILL EMPOWER THEM UP TO FULFILL THIS EXPECTATION.

SECRET #2

Are you aware that your students have unique learning styles? In most school situations, teachers start the new year with "get to know you" surveys and learning style inventories. Why do they do this? They want to get a snapshot of the primary thinking modality of each of their students. This information gives the teacher a quick way to approach each child in their classroom as an individual and helps them understand and adjust their teaching methods to match the learning style of the child.

As a teacher, wouldn't it be to your advantage to know your students' learning styles? ABSOLUTELY! The Learning Style Inventory you have access to with this book is adapted from the Dr. Jonelle A. Beatrice a professor from Youngstown State University who wrote *Learning Style Study Through Critical Thinking*. The inventory divides learning styles into three simple categories: Visual, Auditory and Kinesthetic. What you discover about your students' learning style is a powerful secret to unleashing their learning potential.

If you approach learning situations with your students' by communicating in a language that caters to "their" strengths, you will save yourself hours of frustration.

It is important for you to take the Learning Styles Inventory and compare it to those of your students. Since students are always growing, repeating the inventory every few months will keep you informed about any changes. Understanding your own learning style is also an important factor but you must be aware that your success in helping your students means you must be empathetic and utilize your insight into your students unique learning style to be successful.

To help you understand your students' learning style, with this book, you have access to

Learning Styles in Action adapted from Lynn O'Brien, founder and president of Specific Diagnostic Studies, Inc. from Rockville, Maryland. This will help you recognize learning style characteristics that are observable when a child is in different learning situations.

Check out the Learning Styles Inventory and the Learning Styles in Action at the end of this book. If you can help your students embrace their uniqueness, they will be empowered to approach any learning situations with confidence.

SECRET #2 UNDERSTANDING YOUR STUDENTS UNIQUE LEARNING STYLE WILL HELP YOU BUILD UP THEIR CONFIDENCE IN THEIR ABILITY TO LEARN

SECRET #3

What do you suppose the founders of Google, Larry Page and Sergy Brin, Amazon Founder and CEO Jeff Bezos, Wikipedia founder Jimmy Wales, French chef and television personality Julia Child, and rapper Sean "P Diddy" Combs all have in common? All these individuals went to Montessori schools. Montessori schools encourage children to be curious and ask questions, to explore ideas, and experiment with the world around them, to use real world toys where children learn through imaginative play.

Researchers Dyer, Gregersen and Christensen who study the educational backgrounds of people who are successful innovators, noted that children at age four are constantly asking questions and are curious about how things work. By age six, when children enter school, they quickly find out that teachers value the *right answers more than provocative questions*. The book *Invent to Learn* has the following quote. "I think it is an exaggeration, but there's a lot of truth in saying that when you go to school, the trauma is that you stop learning and you must now accept being taught." Seymour Papert

Because children are expected to learn the pre-ordained curriculum, their curiosity and interests are not considered relevant. Unfortunately, curiosity and motivation can be lost as a result. Many teacher's find themselves in a struggle with the goals the school has for their students where learning for a test or a grade takes precedent over helping a child stay engaged and motivated to learn. As a concerned teacher, you may have seen this scenario play out in your own experience. All is not lost! It is possible for teachers to reignite curiosity once again. National best seller *Creative Innovators* written by Tony Wagner interviewed hundreds of teachers and parents who were able to successfully motivate children to learn. What was their advice? Keep reading to find out the things they did to inspire their students and children become great achievers.

They encouraged their students to explore career ideas and exposed them to junior versions of adult careers. To explain how this works, consider a sport like baseball. When you teach your child how to play baseball do you start by teaching them the rules of the game, and after rigorous testing, move on to baseball vocabulary words and once the words are mastered, pass a baseball and bat around the room so they can finally touch it? Sounds ridiculous! When your students are interested in learning, they need to see the whole picture to provide context and give the learning meaning and purpose.

With this book, you will have access to a Career Interest Inventory you can use to discover what your students may be interested in. It asks the question, "what are you good at" and then lists careers that would be interesting to research that would fulfill that interest. Students enjoy learning about and imitating things that are relevant to real life situations. The career interest inventory is a tool to brainstorm ideas with your students about real-world careers they could learn more about.

When teachers listen to their students and allow them to experiment and take risks, the student will eventually learn to generate their own ideas with the confidence to turn those ideas into real life goals and plans.

SECRET #3 REIGNITE YOUR STUDENTS CURIOUSITY AND MOTIVATION BY GIVING THEM THE REAL-WORLD EXPERIENCES THAT INTEREST THEM.

SECRET #4

Another secret from *Creative Innovators* is the need for teachers to release areas of control as students matures and becomes more and more capable. When students make mistakes in learning, they need to correct it and practice doing it correctly. If they are heavily reprimanded at every turn, this is another way to shut down their learning potential. Keep in mind that every student learns at a different rate and as a teacher, patience will be a virtue you must cultivate if you are going to be successful in helping your students unleash their learning potential. Your students' need to be comfortable enough to admit and work through mistakes and shortcomings with you. You want your students to be authentic and honest. No lying or cheating or faking because they are worried, they will "upset" you. It is essential that you remove your negative emotions from all teaching situations.

In reflecting on our own lives, many times failures were the doorway to greater discovery providing fertile ground for the development of empathy and understanding. How you handle your students mistakes and failures is a critical step in helping them unleash their potential. Learning new things and exploring has its risks. Embracing mistakes as learning opportunities instead of something to be avoided at all costs will help your students grow and develop not only intellectually but in character. The older the student, the more you need to step back and allow them to learn on their own. Your role should transition from instructor to coach. Eventually, you will have a strong foundation for becoming a trusted friend and confidant, which is the best kind of relationship you can look forward to cultivating with your students.

SECRET #4 USE MISTAKES AS LEARNING OPPORTUNITIES AND EVENTUALLY YOUR STUDENTS WILL HAVE THE STRENGTH TO SELF CORRECT ON THEIR OWN.

SECRET #5

“Playrooms and games, animals and plants, wood and nails must take their place side by side with books and words”. Angelo Patri

Angela Patri, a great American educator wrote these words in 1917 and they are still true today. Through the 1980’s, learning to play the piano, making puppets out of pop tart boxes, creating hand-made math manipulatives and learning the importance of physical education were requirements for those pursuing a degree in elementary education. The idea that students learn to understand by exploring and inventing shaped how teachers taught. Several decades with emphasis on high stakes standardized testing, teaching to the test, down-grades in teacher professionalism and data tracking taking priority over teacher expertise, has created classrooms which are increasingly devoid of play, rich materials and time to do projects. Fortunately, teachers like you can change this for your students.

“I do not think there is any thrill that can go through the human heart like that felt of an inventor as he sees some creation of the brain unfolding to success.” Nikola Tesla

The power of projects is the interplay between science, technology, engineering, art, and mathematics (STEAM). There may be a dominate theme for a project, but all areas can be engaged without the a student sensing they cannot build because they may not enjoy math or cannot create because they do not consider themselves to be artistic. Teachers can help their students overcome perceived learning deficiencies by providing project opportunities. To do this, teachers need to create a place or places in and around their classrooms where creative exploration is encouraged.

“To invent, you need a good imagination and a pile of junk.” Thomas Edison

Students need things to "tinker" with, need to know how to safely manipulate tools, and have an array of "junk", materials, parts, and objects. Make a space in your classroom that fills your students with wonder and excitement! Where projects can be left out and returned to time and time again. Your students will learn creativity by being creative. Here is a basic list of items you may want to collect for your creative space:

- Electronic parts and tools
- Craft and art supplies (Pipe cleaners, rubber bands, magnets, modeling clay, fabrics, foam, stickers, googly eyes, feathers, pom poms, sewing supplies, string, tape, glue, a variety of containers etc.)
- Building materials and traditional tools
- Junk of any sort and kind (old phones, calculators, remote controls, clock radios etc.)
- Collect interesting books, or go to the library, have access to online information

When you create a classroom that provides a productive context for learning, achievement will improve, and your students will experience a powerful sense of connection. The added benefit is that conflict and behavioral problems will evaporate when free time is used more productively. When needs, interests, passions, talents, and curiosity take priority, and you focus on your students and their interests, your students will surprise and delight you with their capability, displaying remarkable competence!

Research shows that teachers who use project base learning techniques are more satisfied in their role as a teacher than those who take the more traditional approach. It goes to reason that you can tap into this same sense of satisfaction in your teaching experience with your students too. All it takes is the desire to make learning fun and interesting, and providing the means for your students to do projects they have an interest in. Another powerful benefit for your students is the confidence they will gain when they develop into an innovative, creative thinkers. Businesses are looking for creative thinking skills within the young people they are hiring today. Your students have a bright future to unleash their learning potential and make a significant contribution to the world simply because you decided to enrich your students' education with quality projects.

SECRET #5 IT IS POSSIBLE TO BUILD UP YOUR STUDENTS' LIFETIME POTENTIAL CONTRIBUTION IN THE WORLD BY PROVIDING AN ENVIRONMENT IN YOUR CLASSROOM FOR INTEREST DRIVEN PROJECTS

CONCLUSION

CHALLENGES AHEAD!

Dealing with your students, creating space to let your students learn, make mistakes and be different are challenges that you will face as you move forward to be a different kind of teacher, instructor/coach. I want to encourage you to stay the course. Remind yourself of the importance of your students gaining the skills they need to live an authentic and purposeful life. You may be criticized by other teachers for allowing your students to "dabble" and they may be aghast at the freedom you give your students to discover who they are and to try new things. Your students are real people packed with amazing potential waiting to be drawn out and discovered. Unless they are encouraged to explore, how will they ever discover these untapped wells of potential talent? Ultimately you will need to trust that putting your students first and learning who they are with empathetic understanding, are the right things to do above all else. When your students are filled with joy, are content, and intrinsically motivated to learn and discover, all your fears will melt away and you will be able to silence the critics and become a master teacher whom others will admire and try to imitate. To be a teacher who wants to help unleash your students' learning potential, you must have confidence and courage. Believe me, your students will be forever grateful to have had a teacher like you!

NOT SURE WHERE TO START? HERE ARE SOME FUTURISTIC IDEAS TO CONSIDER

Teachers who read this book are always asking me, how do I know what will best prepare my students for the future? It is recommended that you consider adding one or more of these revolutionary technologies in your learning plan for your students.

FABRICATION-There is reason to believe that fabrication technology has the potential to change the world in an even greater way than information technology has. Manufacturing items in massive factories may become a thing of the past. Imagine placing an order for an item and a digital file being emailed to be fabricated at an outlet near you. Technology for creating customized products is becoming affordable and easy to use. Computer aided design (CAD) and three-dimensional printing is only going to grow in its potential applications. You can prepare your students by helping them hone their design skills with simpler tools such as three-dimensional printing pens, building with cardboard, wood, or metal, etc. If possible, expose your students to three-dimensional printing and computer related design programs. The 3D pen is a powerful tool for designing and constructing. Leonardo Da Vinci made sketches of his design ideas and did not see them made into real objects until he was an adult. Your students have the advantage of taking designs, peeling them from the page and viewing the idea in 3D right away.

PHYSICAL COMPUTING-The ability to create machines that interact with their environment, such as robots provide amazing learning experiences especially since students are fascinated with things that move. Physical computing projects require learners to overcome mechanical obstacles to achieve their goals or to test a design idea. Using toys, parts of broken appliances, learning about electricity and solar power and microcontrollers can inspire amazing learning experiences. There are projects where electric toothbrush motors can be repurposed and placed in a homemade robot for example. Check out the resource list below for books about Robotics and Bots for ideas.

PROGRAMMING- Learning to program a computer is an act of intellectual mastery that empowers students and teaches them to have control over a piece of powerful technology. The computer program languages are now available in formats that students can use and learn. Scratch Jr. (scratchjr.org) is an introductory programming language for children ages 5-7. It is free and can be used with the i-Pad or Android tablets. To program toys and drones Tickle (tickleapp.com) is a lot like Scratch. The app is free, but it does cost a few dollars to add functionality. Code Club (codeclubworld.com) is a community- based learning adventure for students ages 9-13 interested in learning coding.

TEACHER RESOURCES:

Awesome Robotics Projects for Kids by Bob Katovich

Bots! Robotics Engineering by Kathy Cecern

STEAM Lab for Kids by Liz Lee Heinecke

Awesome Science Experiments for Kids by Crystal Chatterton

Awesome Engineering Activities for Kids by Christina Herkert Schul

Math Art Drawing Games for Kids by Karyn Tripp

Math Games Lab for Kids by Rebecca Rapoport and J.A. Yoder

REFERENCES:

Learning Style Study Through Critical Thinking by Jonelle A. Beatrice

Invent to Learn by Sylvia Libow Martinez and Gary Stager, Ph.D.

Creating Innovators by Tony Wagner

LEARNING STYLES INVENTORY

VISUAL, AUDITORY & KINETIC LEARNER

Directions: Select the statement that applies to you. It is okay if they choose more than one answer to a question. The Learning Style Inventory's purpose is to determine your "primary" mode of learning.

1. If I learn how to do something, I learn best when I:

(V) Watch someone show me how.

(A) Hear someone tell me how.

(K) Try to do it myself.

2. When I read, I often find that I:

(V) Visualize and see pictures of what I am reading in my mind.

(A) Would rather read out loud or hear the words inside my head.

(K) Would prefer to move around or act out what I am reading.

3. When asked to give directions to go to a certain location or place, I:

(V) See the actual places in my mind as I say them or prefer to draw them.

(A) Can easily explain the route in detail.

(K) I need to think about being in the location and I will turn and point as I explain the way someone should go.

4. If I am unsure how to spell a word, I:

(V) Write it to determine if it looks right.

(A) Spell it out loud to determine if it sounds right.

(K) Move or look up to the ceiling to see if this helps me remember the spelling.

5. When I write, I:

(V) Am concerned with how neat and spaced my letters and words appear.

(A) Often say the letters and words to out loud or in my mind as I write.

(K) I notice the pencil in my hand as I write but I do not worry about what my writing looks like.

6. If I had to remember a list of items, I would remember it best if, I:

(V) Wrote them down.

(A) Said them over and over to myself.

(K) Moved around and used my fingers to name each item.

7. I prefer to learn new things from someone by

(V) Seeing words or pictures while they talk.

(A) Hearing someone speak in a way that has lots of expression.

(K) Doing things like projects or activities.

8. When trying to concentrate, I have a difficult time when:

(V) There is a lot of clutter or movement in the room.

(A) There is a lot of noise in the room.

(K) I must sit still for a long time.

9. When solving a problem, I:

(V) Write or draw diagrams to see it.

(A) Talk myself through it.

(K) I like to move or move objects to help me think.

10. When given written instructions on how to build something, I:

(V) Read the instructions and try to visualize how the parts will fit together.

(A) Read the instructions out loud and talk to myself as I put things together.

(K) I try to put the parts together first and read the instructions only if I think I need to.

11. To keep occupied while waiting, I:

(V) Look around, or I like to read something.

(A) I like to talk or listen to people while I wait.

(K) Walk around or move my feet as I sit.

12. If I had to describe something to another person, I would:

(V) Be brief because I do not like to talk very much.

(A) I like to talk so I would describe all the details.

(K) I like to move around while I talk.

13. If someone were describing something to another person, I would:

(V) Try to see in my mind what they are saying.

(A) I would listen, but I am thinking about what I would say.

(K) I could get bored if they talk too long and go into too much detail.

14. When I am trying to remember a person's name, I usually remember:

(V) Faces but forget names.

(A) Names but forget faces.

(K) I would remember meeting the person instead of remembering their name or face.

Scoring instructions: Add the number of responses for each letter and enter the total below. The area with the highest number of responses is your **primary mode** of learning. If you have a high score in two or more sections, you have more than one strength. If the scores in each modality are roughly equal, you do not have a preferred learning style and would be considered a multi-sensory learner.

Important Note. Learning style are not static and are subject to change. It is good to take the Learning Styles Inventory every few months to see how you are changing and growing in your learning style.

Visual Auditory Kinesthetic

V = _____ A = _____ K = _____

Learning Inventory Adapted from, *Learning to Study Through Critical Thinking*, Jonelle A. Beatrice

OBSERVABLE LEARNING STYLE CHARACTERISTICS

The following table summarizes observable characteristic of the three learning styles. It provides an informal means of assessing your students preferred approach to learning.

MODALITY	VISUAL	AUDITORY	KINESTHETIC
PREFERRED LEARNING STYLE	Learns by seeing or watching demonstrations	Learns through verbal instructions from self or others.	Learns by doing and direct involvement.
SPELLING	Recognizes words by sight; relies on configurations of words.	Uses a phonics approach has auditory word attack skills.	Often is a poor speller; writes words to determine if they "feel" right.
READING	Likes description; sometimes stops reading to stare into space and imagine scene; intense concentration.	Enjoys dialogue and plays; avoids lengthy descriptions; unaware of illustrations; moves lips or sub-vocalizes.	Prefers stories where action occurs early; fidgets while reading; not an avid reader.
HANDWRITING	Tends to be a good, particularly when young; spacing and size are good; appearance is important.	Has more difficulty learning in initial stages; tends to write lightly.	Good initially, but deteriorates when space becomes smaller; pushes harder on writing instrument.
MEMORY	Remember faces, but forgets names; writes things down; takes notes.	Remembers names, but forgets faces; remembers by auditory repetition.	Remembers best what was done, but not what was seen or talked about.
IMAGERY	Vivid imagination; thinks in pictures; visualizes in detail.	Sub-vocalizes; imagines things in sounds; details are less important.	Imagery not important; images that do occur are accompanied by movement.
DISTRACTABILITY	Unaware of sounds; distracted by movement.	Easily distracted by sounds.	Not attentive to visual or auditory presentation so may seem distracted.
PROBLEM SOLVING	Deliberate; plans in advance; organizes thoughts by writing them; lists problems.	Talks problems out; tries solutions verbally or sub-vocally; talks self through problems.	Attacks problem physically; impulsive; often selects solution involving greatest activity.
RESPONSE TO PERIODS OF INACTIVITY	Stares or doodles; finds something.	Hums, talks to self, or talks to others.	Fidgets or finds reasons to move.
RESPONSE TO NEW SITUATIONS	Looks around or examines structure.	Talks about situation; discusses pros and cons of what to do.	Tries things out; touches, things or manipulates what is around them.

Adapted from Lynn O'Brien, founder and president of Specific Diagnostic Studies, Inc. from Rockville, Maryland

Career Interest Inventory

Read through the I AM GOOD AT information in each section and consider exploring with your students one or more of the careers listed.

☐ **I AM GOOD AT** working with my hands, working with machines and tools, and/or building and fixing things.

You may enjoy these careers:		
Carpenter	Engineer	Pilot
Chef	Firefighter	Plumber
Electrician	Mechanic	Truck driver

☐ **I AM GOOD AT** studying math or science, solving problems and puzzles, and/or working with computers.

You may enjoy these careers:		
Accountant	Crime scene investigator	Pharmacist
Architect	Data security officer	Scientist
Astronaut	Doctor	Statistician
Biologist	Engineer	Systems analyst
Chemist	Financial advisor	Veterinarian
Computer programmer	Geneticist	Video game designer
Computer technician	Meteorologist	Web designer
Conservationist		

☐ **I AM GOOD AT** singing, acting, dancing, or playing music; being creative (writing, art, etc.); and/or speaking or performing in front of others.

You may enjoy these careers:		
Actor/actress	Editor	Producer
Agent	Landscaper	Reporter
Animator	Librarian	Singer
Art teacher	Marketing executive	Songwriter
Artist	Musician	Teacher
Designer	News anchor	Writer
Director	Photographer	

☐ **I AM GOOD AT** helping people solve problems, helping people feel better, and/or teaching people how to do things.

You may enjoy these careers:		
Chiropractor	Librarian	Teacher
Coach	Nurse	Therapist
Counselor	Nutritionist	Trainer
Hygienist	Paramedic	

☐ **I AM GOOD AT** leading projects and people, selling things or ideas, and/or being in charge of people.

You may enjoy these careers:		
Advertising executive	Manager	Real estate agent
Insurance agent	Paralegal	Salesperson
Lawyer	Politician	Stockbroker

☐ **I AM GOOD AT** working with numbers, being organized, and/or following a set plan.

You may enjoy these careers:		
Administrative assistant	Data entry specialist	Payroll clerk
Bank teller	Desk clerk	Postal clerk
Bookkeeper	File clerk	Secretary
Court reporter		

☐ **I AM GOOD AT** learning about history or geography, caring for family and home, and/or taking industrial technology classes.

You may enjoy these careers:		
Archeologist	Cosmetologist	Surveyor
Carpenter	Historian	Tour guide
Chef	Mechanic	Travel agent
Child care provider	Politician	Welder

Career Interest Inventory adapted from the Pennsylvania Higher Education Assistance Agency (PHEAA).