

Prolific Learning Series Volume 1
Steven R. Stuve, Ph.D.



What You Need
to Know about

Learning

For All Ages

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This book is the first volume in this series. The second volume builds on material in this book. The rest of the volumes focus on particular topics and skills. You can get the latest version of each book from the **prolific-learning.com** website.

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Chapter 1

What is Learning?

Do you know what it feels like when something is comfortable and familiar? It might be a house you've lived in for years. It might be your favorite toy or book or shirt. It might be how your bed feels each night. It might be the smell of cookies baking.

Do you know what it feels like when something is unfamiliar and new? It seems strange and different. You might feel curious or uncomfortable. It might remind you of other things. When you visit and stay at someone's house, it will feel different and maybe smell different. Sleeping in a different

bed just doesn't seem the same as sleeping in your own. It might be when you see a new food that you've never had before. You might be curious or you might not want to try it.

Do you know what it feels like as you become used to something? This is like when you move to a new house. At first, it seems strange. But then it becomes more and more familiar and comfortable. It's like if you get a new bed or new clothes. At first they feel different, but then you get used to them.

This is what learning is. Something starts off as unfamiliar and then it gradually becomes more and more familiar. Your brain does this all the time without you realizing it. Your brain is very good at this. All of our brains are very good at it. It just happens so often that we've gotten used to it. If you think about that, it means that we already know how to learn.

Sometimes the things you learn are not fun. You learn what things hurt. You learn what a mosquito bite feels like or what it feels like to step on a sharp rock. You learn what it feels like when someone hurts you. Our brain learns the bad

things to help protect us so we stay away from them.

Most of the time, we go through life with our brain learning things we want to learn. We get interested in something and our brain learns it. It becomes more familiar. We see something curious and our brain learns about it. Our brain learns songs we like, the taste of our favorite food, our favorite story, our favorite toy, our favorite game and how to call our favorite person on the phone. Think of everything you like to do. Your brain has learned all of those things.

Your brain is incredible. Think about all of the places you know. Think about all of the people you know. Think of all of the things you can do. Your brain learned all of this. Think of all of the words you know. Think of all of the facts you know. Think about your favorite thing to do. You know a lot about it. Your brain loves to learn new things. It loves to become familiar with things. It loves to learn.

This is what it means to learn something new. Your brain just becomes more and more familiar

with it. You just get better and better at doing it. When I first picked up a guitar, it felt strange. I didn't know how to hold it. The strings hurt my fingers a little bit at first. It didn't make very good sounds. It felt clumsy trying to get my hands to work together. But over time, it became familiar. Now it is like an old friend. I can just pick it up and it feels comfortable. I can just make music on it now.

From Unfamiliar to Familiar to Mastery

Do you know what the most special thing is? Your brain can learn to do just about anything. When you start, it will feel unfamiliar, clumsy, uncomfortable, and strange. But day after day, each time you do it, it will start to feel a little more familiar. You will get better and better at doing it. As time goes on, it becomes more and more familiar. If you still keep learning something, you start to master it. You become outstanding at it. This is what learning is all about. It is just the natural process that your brain does all of the time.

Chapter 2

How Does Your Brain Work?

We all know our brain can learn things, remember things, and forget things. But how does it work? The answer is very complicated. Scientists write many essays and books about it. There is still a lot they don't know about the brain. But the good news is that there is a simple way to think about how our brains work. It's not perfect, but it will help you understand many things about learning.

Your brain does two important things. It can *store* things and it can *retrieve* the things that are stored. You can think about this like putting things on shelves and then going to get them, except it is more complicated. Your brain stores memories.

Anything you can remember like your last birthday party, the picture on the cover of the last book you read, and what your face looks like in a mirror. Your brain stores facts like the date of your birthday or that $2+3=5$. Your brain stores skills like how to tie your shoes or ride a bike. Your brain retrieves things when you want to use them. When you want to tie your shoes, your brain retrieves that skill. When you want to ride a bike, your brain retrieves that skill. When you want to know what $2+3$ is, your brain retrieves that fact. When you want to think about what your house looks like, your brain retrieves that memory.

Have you even seen an old photograph of you or your family? Sometimes you remember it. But what happens when you had forgotten about it? It's like the memories suddenly come flooding back. Your brain still had stored the memories, but you couldn't retrieve them. For us to be able to use things like memories, facts, or skills, we need to be able to retrieve them.

What happens the first time you do something new? Pretend you have a new game that you've

never seen or played before. It will seem unfamiliar and strange. What happens when you pick up the game pieces and start playing the first time? Your brain starts storing those memories. There is a lot to store so your brain does the best it can. It will store a few of the things you see and do. You play the game again. You can start to retrieve what your brain stored. You can look at a piece and remember what it does. The game will seem a little more familiar to you. Your brain has stored more and you have retrieved more. When you play the game again, it will seem more familiar.

Something amazing is happening in your brain. It is slowly building a complicated network of storage and retrieval. It's like when a spider makes a web. It starts with a few strands. It then keeps adding more and more strands until the web is finished. Your brain is doing something similar. But the network in your brain is much more complicated than a spider web. Each time you play the game, your brain stores more and you retrieve more. More and more connections are built in your brain. That is why the game feels more fa-

miliar each time you play. That is why you can start to make more complicated moves or plays.

This is how learning moves from unfamiliar to familiar to mastery. Your brain just slowly builds a structure of storage and retrieval that can do more and more as it grows. When you help your brain do this, the structure grows faster. If you do not help your brain, the structure won't grow much. That is why I am writing this book. I want you to know how to help your brain learn.

Chapter 3

Pick the Right Recipe

If you want to bake a cake, you must use a cake recipe. If you want to bake cookies, you must use a cookie recipe. If you want to bake bread, you must use a bread recipe. It seems pretty simple, doesn't it? The recipe you use determines what you get.

A recipe is an example of a *method*. A method is a way of doing or making something. We call a method a recipe when it is used for cooking something. There are methods for doing just about everything.

Sometimes there are different methods for doing the same thing. Imagine there is a farmer who has a large pile of rocks in the middle of a field. He needs to move them a long ways to the edge of the field. He asks some friends what to do. One friend tells the farmer to carry them one at a time. Another friend tells the farmer to use a wheelbarrow and move several at once. Still another friend tells the farmer to use a truck. These methods will all move the rocks. The best one for the farmer will be to use the truck. He can move the rocks faster and he won't be too tired to do his other work.

Imagine the farmer has another friend who is an athlete. She wants to exercise and become stronger. She tells the farmer that she will carry all of the rocks across the field. Each day, she moves several rocks. It helps her become stronger. The rocks still get moved but the farmer's friend has gotten something else out of it. She has gotten exercise.

Some methods are better for different people. The farmer was only thinking about moving the rocks as easily as possible. If the farmer had carried the

rocks, he would have been too tired to do his other work. The athlete was thinking of exercise. If she used the truck, she would not have gotten any exercise. There were different methods to move the rocks. One was better for the farmer and one was better for his friend.

How do you choose a recipe? Suppose you want to bake some cookies. You want to try a new recipe. You look through a recipe book and find many different recipes. How do you know which one to try? You could just pick one. Or you could ask other people what they think. Your mom or dad or grandma or grandpa have eaten many cookies in their life. They could tell you what recipes sound good. They will probably tell you different things. But you will now have a good idea what recipes would be best to try.

What is the first thing you should do when you want to learn something new? You should find out what methods you could use. It's like looking for recipes in a cookbook. There is one problem. For many things you want to learn, there is no cookbook. You will have to ask people for advice. If you listen to one

person, they will tell you one method. If you listen to another person, they will tell you another method. If you ask another person, they might tell you yet another method. What should you do? You should ask many people for advice. It is like the farmer asking all of his friends for ideas instead of just one. It is like asking people what cookies they like best. There are probably many methods you might use. But there will probably be one that is best for you to use.

What is the next thing you should do? You can try a method and see how it works for you. Give it a chance and see if you like it. See if it is working for you. If it is, that is good news. If it is not, that is okay. This was an experiment. You can try a different method and see how well that works.

How will you know if a method is working? The first way is that you enjoy doing it. You learn better when you like what you are doing. Your brain works better when you like what you are doing. The second way is that things become more familiar to you. Some methods might be fun, but you might not learn much. If you are becoming more

and more familiar with what you are learning, the method is working.

How can you tell if a method is not working? One way is if it feels like hard work and you do not like doing it. This affects your brain. Your brain doesn't work as well. Another way is if things are not becoming any more familiar. You are not learning much. But do not give up right away. Sometimes it just takes you awhile to get used to the method and it will work. Sometimes you are just having a bad day and nothing would work. But if you give it a good try and it is not working, you should try a different method.

Sometimes you might outgrow a method. Do you know what it is like when you outgrow your clothes? You might have a favorite jacket or sweater that just doesn't fit anymore. That doesn't happen overnight. It just happens day by day. It is just not as comfortable as it was. It starts to get too tight. It just doesn't feel as good to wear anymore. The same thing can happen to methods. You might use a good one for awhile and it works very well. But after awhile you might out-

grow it. How will you know you are outgrowing a method? It might not be as enjoyable. It might not be working as well. You will then need to find a new method.

Sometimes you are not ready for a method. Sometimes one method might not work for us right now but it might work later. Think about the difference between picture books and chapter books. Could you read a long chapter book when you first started reading? You probably couldn't. If you tried, it would have been frustrating. But once you've gotten more familiar with reading, chapter books are easier to read. Some methods are like picture books. They work best when you start learning. Some methods are like chapter books. They work best after you can read some.

Good learners choose good methods. You need to learn what works for you. Other people can give you advice, but you need to see if it works.

Chapter 4

Pick Your Own Journey

Where would you like to go visit? How would you like to get there? Everybody will have a different answer. Some people want to see a city. Some people want to see the ocean. Some people want to see mountains. Some might want to go visit relatives. Some people want to drive. Some want to ride a plane or a train. We are all different. We would all prefer to do something different. We will all have to travel different directions and different ways to go where we want.

What would you like to learn to do? Your answer will be different from other people. Someone

might want to play piano or guitar. Another might want to paint pictures. You might want to program a computer. Someone else might want to play basketball, baseball, or soccer. There are many things that you might want to do. Everyone can pick one of those things and start to learn it. Everyone will have to choose different methods.

Here is something that most people don't think about. It is very important. Imagine you and many other people want to do the same thing. Let's imagine that you all want to learn to play the piano. That probably sounds like you all want to do the same thing. But is it? What do you want to do with the piano? You might want to play classical music. You might want to accompany a choir. You might want to play in a rock & roll band. You might want to write songs. You might want to play in front of many people. You might want to do it for fun with a few people. You all will probably want to do different things. You will all have to use different methods.

What would happen if you went to the airport and got onto the wrong airplane? Would you get to

where you want to go? No. You would go somewhere else. You must get on the right airplane. This is what happens when you pick a method to learn piano. It will take you to some destination. A different method will take you to a different destination. You must choose the right method. Many people choose the wrong method. They travel a long time and get to the wrong place.

How do you pick the best method for you to learn piano? Remember the farmer with the rocks. It was better for him to ask many people for ideas than just one. Remember picking which cookie recipe to use. It is good to ask several people what cookie recipes they like. You should ask different people for ideas about methods that would work for you. You need to tell them what you want to do with the piano. If you ask around enough, someone will tell you a good way to get to where you want. You can then experiment to see if that method works for you.

How much time do you want to spend visiting someplace? Do you want to spend a long time? Or just a short time? Would you prefer to visit

one place for a long time? Or several places for a short time? Everyone will have a different answer. Someone might like to visit one place and stay a long time. Someone else might want to visit several places instead.

It is the same way with learning. You can choose to learn a few things well. You can learn to do many things but they won't be as familiar. I've seen many people in life. Most people seem happiest choosing a few things to become very very familiar with, some things to become mostly familiar with, and many things to become sort of familiar with. The journey of learning you take will be different from everyone else. You need to choose what you want to do. You need to find the methods that will help you. You need to decide how to spend your time.

Chapter 5

A Cookbook and Food

What is the difference between a cookbook and food? That's easy. A cookbook tells you about food but food is really food. You can learn about food from a cookbook. But you can only eat food after you've actually prepared it. You could read a cookbook all day, but you will become hungry if you don't eat real food.

If you want to learn how to do something, make sure that you are learning how to do it. Be careful that you are not just learning about it. What is the difference? When you learn about something, that is like looking at a cookbook. When you learn to do something, that is like cook-

ing and eating food. A cookbook is helpful. It can tell you how to prepare food. It can tell you what combinations of ingredients work together best. It can tell you how healthy some ingredients are. The food you make will be better because you've read a cookbook. But, when you are hungry, you need to cook some food and eat it.

Imagine that you are a good cook. You've cooked many different recipes and many meals. Cooking is familiar to you. What has happened in your brain? We talked about this before. Your brain has built a complicated structure of storage and retrieval for cooking. Each time you cooked something, your brain added to the structure. Your brain now remembers many ingredients, how they work together, how you prepare them, how they smell when you are cooking them, and most importantly, how they taste when you eat them!

Should you memorize many recipes in a cookbook? That seems like a silly question. You don't have to memorize them. You can open the cookbook and see the recipe if you need it. If you are

a good cook, you might have some recipes memorized. It is because you have cooked some of your favorite recipes many times. You've just done it so much you learn some of them by heart.

Now imagine that you've never cooked before but you want to learn how. Someone tells you that all good cooks have memorized many recipes. They think you should start memorizing recipes so you can become a good cook. You follow their advice and start memorizing recipes. You work hard and you memorize many recipes. Your brain has built a good structure of storage and retrieval. But there is a gigantic problem! Your brain has learned the wrong thing! Your brain has not learned how to cook. Your brain has only learned how to memorize recipes!

Will you become a good cook memorizing recipes? No. You won't become a good cook until you have practiced cooking. There is also something very sad that happens if you memorize many recipes. At some point, you will figure out that memorizing recipes is not making you a good cook. You will stop memorizing and your brain

will start forgetting them. That time you spent memorizing those recipes will be wasted and you will not be a better cook.

You have to be very careful and watch out for this! Many people do this when they start learning something. They start memorizing information from books instead of practicing. They work harder and harder at memorizing, but still cannot do what they want to. This is why many people start lessons or other things and then give up. When you start to learn something new, some people will tell you that you have to memorize many things first. You should ask more people what they think before you just start memorizing things in books. *Good advice will always include spending most of your time practicing what you really want to learn to do.*

Chapter 6

The Do-and-Look Method

There are probably many things that you would like to learn to do. Here is a method that will help you learn how to do new things. It works for many things and is easy to do.

Here is the general idea. You first do something and then you look and see what you like about it. You then do it again. You look at that and see what you like about it. As you keep doing this over and over, you will get better at what you are doing. That's all there is to it. *You practice doing something and you practice seeing what you like about it.*

Looking *Carefully*

People who are very good at doing things have learned to look very carefully. They see many details that most people do not see. Here is an example. Look at all of these letters.

A A A A A A A A A

They are all the letter A but they each look different. Which is your favorite? It's okay if you have more than one favorite. Now, look more carefully at the letters. What do you like about your favorite? Is it because it is straight? Or curved? Is it because it is thicker? Or thinner? What is it that you like about your favorite?

Calligraphers are people who can write different types of letters. They look very carefully at how letters are written. They notice many things. Some lines are straight and some curved. Some lines are thicker and others are thinner. Some have little lines as decorations. They are familiar with all of these things. It is because they have looked

carefully many times at many different types of writing.

It doesn't matter what skill you are learning, there will be something to observe. If you are writing or drawing, you can see it. If you are playing music, you can hear it. If you are cooking, you can taste it. Practice observing carefully. You will start to see what it is you like about things.

Look carefully at what other people do, especially people who are very good at something. You will learn more about what you like. You will also get ideas for things you can try yourself.

Practice Doing Things

The only way to learn a new skill is to start doing it. The more you do it, the more you improve. As you do things, your brain slowly builds a structure for that skill. It becomes familiar. It becomes easier to learn more about it.

It is important to start simple. If you want to learn to cook, do not try a seven course meal of complicated foods. Start off with one type of food

with a few ingredients. Practice making that first. As you get better at that, you can try doing new things. Your brain needs a chance to get used to new things.

One reason to do simple things first is that it is easier to do it more times. The more times you practice something, the more it becomes familiar. As it becomes more familiar, it is easier to improve. It becomes easier to learn more.

Another reason to do simple things first is that it is easier for you to look carefully. There will be many details you have to learn. It is hard to become familiar with something complicated. It is easier to become familiar with something simple. As it becomes familiar, you can start moving from simple to complicated.

Do and Look

You need to practice things and look carefully at things. As you do this, it will become a habit. As you do something, you will just get used to looking carefully. As you look carefully, you will get ideas

of what to do differently. You will be teaching your brain how to learn and improve. Each time you do something and look carefully, you will learn something and get better at it.

At first, you might have to consciously think about Do and Look. But after awhile, you will just get used to doing it. It will feel natural. Using do-and-look is a skill. As you practice it, it will become more familiar.

Remember that you are looking to see *what you like*. You are *not* looking to see if it is right or wrong. There are some things that you need to worry about right or wrong like adding $2 + 2$ and getting 4. But many things are about if you like them or are improving. If you are cooking food, you want it to taste good. If you are drawing a picture, you want it to look good. If you are playing sports, it is about playing better.

Chapter 7

The Explore-It Method

How many places are you familiar with? You know your home. You have favorite places that you know. You probably know the homes of friends or relatives. Think about how many stores, restaurants, buildings, parks, trails, and other places you have been. Your brain probably remembers many of them.

Your brain is amazing. After you have visited a place a few times, you remember it. You do not have to work at it. As you explore new places, your brain naturally becomes familiar with them. The

more times you visit a place, the more things you can remember about it.

When you start learning something new, you should explore it. Let your brain start becoming familiar with it. Each time you visit, you will remember more about it. Your brain will naturally do this. This works better if you visit many times. One long visit does not work as well.

How to Explore

Suppose you have a book about some subject you want to learn about. You explore by enjoying reading the book. Start reading. Once you get tired of reading, stop and just leave it. Later on when it seems like fun, pick up the book and read more. Re-read sections that you like. As you do this, you will become more familiar with it.

That's what exploring is about. You go places that seem interesting. They will become more familiar to you each time you visit.

You can use books, articles, online resources, or listen to people. Anything that shows you more

about something will work. You can look up things about your subject in many places. Find sources that you enjoy.

Some Advice for You

This should be fun. If you start getting frustrated, bored, or tired, just stop. Your brain knows when you are bored and doesn't work as well. Your brain works better when you enjoy yourself.

This is not about knowing everything. This is about slowly becoming more familiar with something. There will always be more to learn. Be patient and enjoy yourself.

There is no time pressure. Just enjoy slowly wandering and exploring. Your brain will become familiar with things at its own speed.

Chapter 8

How to Get Started

Author's Note: I will be adding resources for learning particular things onto the prolific-learning.com website. These resources will be built around the ideas of learning presented here. The intent is for people both to learn something worthwhile and to practice learning something new.

When you start learning something new, there are two things you will be learning. First, you will be learning the new thing. Second, you also will be learning how to learn new things. I don't just want you to learn one new thing. I want you to be able to teach yourself anything that you would want to learn. Each time you teach yourself a new thing, you get better at learning new things.

The best way to become a good learner is to practice learning. You will become a better learner by starting with some simpler things first. This lets you practice learning on more things than if you started on one very big thing. If you save the big special things that you really want to do for later, you will be much better at learning when you do start them.

Make a list of things that sound like fun to learn. They can be small things or big things. Don't rush. You could take a few days to do this. You could ask other people for ideas. You could go online and search for ideas. The important thing is that each one sounds like fun to you.

Look carefully at this list and choose something that is easy to get started with. It should be something you could start now. It should be something that you don't have to buy special equipment or supplies for. You should be able to start with things you easily have on hand.

Find information about it. Look up some different sources and get different opinions on how to do it. Different sources explain things differently. You

will want to find a few sources that make sense to you. If you are learning with someone else, you can talk about which source seems best to use.

Get started! If it is a new skill, start practicing it. Remember the Do-and-Look method. After you've done something, look at what you've done to see what you like about it. Each time you try it, you'll get better at it. If it is learning about something, start reading or exploring. Remember the Explore-It method.

Enjoy the progress you see. Many people set goals and are discouraged if they don't meet them. Progress occurs as your brain builds structures from learning. This happens at the pace it happens. It is different for each person. Learn to be happy with what you have accomplished.

You can decide when to do something else. There are some things that you will enjoy more than others. Those things might become part of your life for a long time. Other things might be an interesting diversion for awhile, but you do not want to keep doing them. Either way is fine. Everything you

learn helps you become a better learner. This will help with every new thing that you decide to learn.

Chapter 9

Why is Learning in School Hard for Some of Us?

Author's Note: At first I was not going to include this chapter. However, I realized I needed to. Countless people did not do well in school or particular subjects in spite of years of sincere efforts. Some come to see little value in learning. Others come to believe there is something wrong about themselves. I hope in this chapter to explain why many people struggle with school or particular subjects. For some, this chapter is basically to say “it was not your fault. You are capable of more than you think.”

We’ve spent some time reading about how we are all good at learning and how it should be fun. However, something strange happens to many people in school. They find that learning becomes hard work. It is no longer fun. They might

try very hard, but they find some things difficult to learn. School just becomes very frustrating for them.

There are many grownups that don't like education because they didn't like school. They didn't do well in some classes and on tests. It was like playing a game where you usually lose and hardly ever win. After awhile, it's not fun anymore. With a game, you can stop playing. With school, you have to keep going for years. Many grownups were happy when they graduated and didn't have to go to school again.

If we are all so good at learning, why does this happen? For many people, the reason is this. We are all different and learn best in different ways. In school, we are all forced to learn in the same way. Some kids are lucky. The school uses ways which are close to what is best for them. Some kids are unlucky. The school uses ways which do not work for them. Let's think about the different things we've see about learning so far. Let's see how they might apply to some people in school.

We saw that learning is becoming more and more familiar with something. It is like moving into a new home. At first it is unfamiliar but it becomes more familiar each day. Some people get used to their new home more quickly than others. When something new is taught in school, it is unfamiliar. Everyone becomes more familiar with it at their own pace. However, there are deadlines and some people miss the deadlines. This often happens again and again. This is unpleasant and frustrating. Some kids start to believe something is wrong with themselves because they are too slow. But it was not them. They would have become familiar with it but did not have enough time.

We saw how important it was to use methods that work best for us. What happens in school? Often one method of learning is used. Some students are lucky. That method is good for them and they learn. Some students are unlucky. That method is not good for them and they do not learn. As it happens over and over, they might start to believe that they are slow or dumb or the subject is too hard. But it was not them. They could have

learned more easily with a method that worked better for them.

We read about picking our own journey. Each of us will want something different out of what we learn. What happens in school? Students are usually all given the same destination. Some students want to go in that direction but many do not. Some will enjoy studying the new material and others will not. Our brains can tell when we enjoy doing something and when we don't. When we enjoy it, our brains like to learn and work well. When we dislike what we are doing, our brains don't work as well. We have to work even harder to keep up which makes us dislike it even more. At some point, it becomes too much work to keep up. Some students start to give up.

We read about a cookbook and food. There is a difference between learning *about* something and learning *to do* something. We learn new skills by practicing them. What happens in school? Some classes do have students practice skills so they do become better at them. But many classes have students memorize information about skills. Stu-

dents sometimes spend much more effort memorizing than practicing. They don't gain new skills and later they forget what they memorized. They put in much effort and time and have little to show for it.

Why is school structured this way? It's a long story that I'll not share here. I'll explain why with this example. Why does the letter A sound different in cat, gate, swan, many, and zebra? Why does the letter combination OUGH sound different in bough, rough, cough, through, thought, and drought? Long ago, English was pronounced differently and those spellings made sense back then. We just keep doing it now because that's the way it's been for centuries. It could be better. However, this system is still far better than not having any way to write down English. Our western system of education is similar. It's what we've used for many years. It could be better. But it is much better than having no school system at all.

Teachers and other people who work in schools are well aware of these things. They do try hard to help each student. The problem is that

there are now laws and regulations and expectations about how they are supposed to do things. There are many things that individual teachers cannot change. They do the best they can within the system they are forced to use.

A word of encouragement for adults: If you are a person who struggled in school, please do not let that define you. Chances are that at least some of your struggles were due to the system itself rather than you. A part of the reason I am writing and creating material about learning is to encourage people who have fallen through the cracks of the system. While I am writing this book mainly for my grandkids, I am also hoping others will listen in. Please feel free to try some of the things I'm writing here for yourself. Try some of the projects and things on my web site. I'm intentionally picking skills that would make lifelong skills to start learning. I don't want to see kids kept busy but rather enjoyably building on things they can use for life. These are things that could be started at any age.

Chapter 10

Helping Others Learn Things

You can use what you've learned in this book to help others. I hope you see that everyone is capable of learning new things. We just each have to learn what works best for each of us. Here are some things we can all do to help.

Give honest encouragement. If someone is trying something new, look for things that you like about it. Learning is the journey from unfamiliar to familiar to mastery. As we start out, things will be awkward and clumsy at first. Don't expect perfection and mastery right away. Look for things that are going good to comment on.

Don't overwhelm someone with advice.

If you see ten things that someone needs to improve on, don't tell them about all ten. Pick the most important one only and then decide if it will help or distract them. Remember that learning occurs because their brain is building a complicated structure of storage and retrieval. It is sort of like putting together a jigsaw puzzle. Don't come in and accidentally scatter all the pieces.

The methods that work for you might not work for someone else. Help people experiment to find what methods work best for them. It is fine to tell people what works for you, but realize that it might not work as well for them.

We are each different. Some people prefer to focus on details and some prefer to focus on the big picture. Some people prefer to think about things before starting and some people prefer to start right away. There are many other ways we prefer to learn that are different. These are not right or wrong but just different. We each have to learn to use our own preferences to become good at what we do.

Help people learn to do things for themselves. Don't do things for people. You can perhaps show how you do it as an example, but help them practice learning. It is not just about the particular thing they are learning. It is also about practicing how to learn anything new.

Be a good example. The best way you can help others is to be a good example yourself. Learn to do new things yourself. Let others see you at the stage where things are unfamiliar, awkward, and clumsy. Let them see how you make progress. Let them see how you go about learning something new.

This book is part of a home-made gift I am creating for my grandkids. I wish to leave them a legacy of learning. It's what I wish I'd have known my entire life. The website **prolific-learning.com** is my workshop so to speak. I want it to be like the real workshops where many grandkids spend enjoyable hours puttering and learning from their grandpas. I decided to share this with other families. It's where I'll be putting various things as I work on them. It will have free resources, videos, and information available.

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