The Art and Science of Motivation

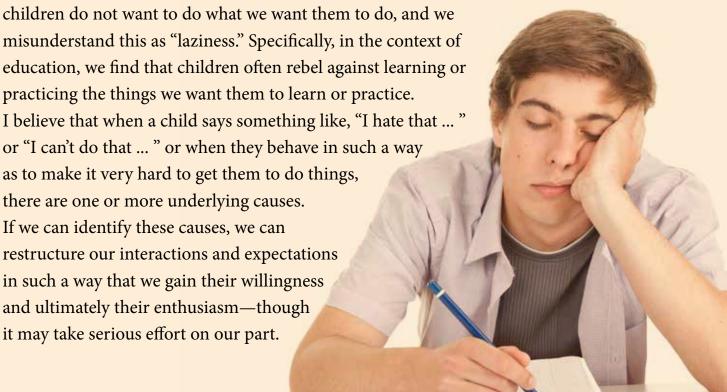
Part One: The Four Forms of Relevancy

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by Andrew Pudewa

Thave studied the science and art of motivation for many years, first as a violin teacher, then as a writing teacher, and finally as a parent. Although I am far from perfect in my understanding and practice, I have found some basic principles which have helped me and many other parents understand their children better, empowering us to more effectively motivate our kids at times when resistance and unwillingness may seem overwhelming.

Parents can easily think—and often say—that their child is "lazy." I challenge that idea. A genuinely lazy child is a rare thing; children left on their own are tremendously industrious creatures. It might be possible to create a lazy child with years of continuous television and videogames, but in general, children are not lazy. In his excellent book, The Myth of Laziness, Dr. Mel Levine analyzes several cases of people considered "lazy" and explores the internal and external factors that directly affect productive output; it is a book that can benefit every teacher and parent. However, in our home education efforts, we often find times when our



One of the Seven Keys of Great Teaching as explained in Oliver Van DeMille's book, A Thomas Jefferson Education, is: "Inspire, not Require." DeMille also points out that doing this can be a tough job. To require performance ("Do this or suffer punishment of some sort") is easy, but to inspire a student to want to work and learn necessitates much more effort on the part of the parent or teacher. However, DeMille also points out—quite accurately—that no real learning happens unless the learner chooses to learn. No one can "make" anyone else learn anything. Yes, maybe someone can threaten us into studying and retaining information long enough to pass a test of some sort, but there is no lasting effect. Any of us who slogged through a mindnumbingly boring high school biology class (and maybe even got an A!) but don't know any biology today (and probably didn't three months after the school year was over) can attest to the fact that it is possible to pretend to learn and get a passing grade, but in actuality to learn almost nothing in the process. Therefore, in my study of motivation, I have isolated a factor that most often determines when and whether real learning will occur, and I use the word Relevancy to identify it. If something is relevant to you, if it is significant, meaningful, useful, interesting, helpful to you, then it is easy to study and learn. If something is not relevant, not significant, not meaningful, not useful or interesting, then it is very hard to study and learn. I see this as being so true in my own life, and true for almost every child I have ever met. I have also discovered four basic kinds of relevancy, and because some are more powerful than others, a parent or teacher who understands them can utilize the information quite beneficially. The four forms of relevancy are: Intrinsic, Inspired, Contrived, and Enforced; they are generally effective in that order.

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Intrinsic relevancy is when something is interesting because it is. Intrinsic interests are likely formed by a combination of personality and environment, and we all have specific interests—some of which may have surfaced at a young age, most of which tend to become stronger as we grow into adulthood. Clearly, children have certain interests common to all and useful for survival: For example, almost all children are interested in knowing about animals that are dangerous or poisonous; almost all boys have an interest in weaponry. Then, most children start to show more defined and specific interests as they move into the age of reason. Often their interests are very different from ours, and we wonder where that fascination came from. However, as teachers and parents, we can and should capitalize on these intrinsic interests.

As homeschoolers, we have a great deal of freedom in our choices of curriculum and content—much to the benefit of our children, if we are willing to maximize in the curriculum things which are most relevant to them. The number of things we could learn is unlimited, and we will never learn everything about everything—we will never "cover all the bases." No teacher in any school anywhere is "covering all the bases," so don't even try. That's the bad news and the good news. Since the number of possible things to learn is unlimited, and we can't do it all, we can make choices—and whenever possible, choose things that are naturally interesting to our children. They will be much more motivated and have much better retention, as can be seen by how most boys will learn about Medieval Weaponry far more easily than they will learn about Edible Plants of North America. If you have a choice, go for what has Intrinsic Relevancy, and more real learning will happen in the time available.



The second form of relevancy, Inspired, can also be very effective. Although a child may not have a natural interest in something, he or she will easily become interested if someone they love or respect has a sincere enthusiasm about it. Excitement can be contagious. Most of us liked the subjects in school that were taught by the enthusiastic, knowledgeable, excited teachers, and we disliked the subjects taught by mechanical, dull, uninspiring teachers. Children will often become interested because of peer associations, and very often children want to learn about the things their parents enjoy learning. To maximize Inspired Relevancy, we as parents and teachers want to provide opportunities for children to see others excited about what they're learning, to be joyful and enthusiastic in our teaching, and if we cannot, find other parents or teachers who are excited. Perhaps we can even set up a little class for our kids and some of their friends. An adult who loves chemistry (and shows it) will be far more effective in teaching and motivating students to study than someone who teaches it reluctantly or hesitantly. Although some children are more easily inspired than others, all children can be inspired with this form of relevancy, which is powerful and important as we design and implement educational opportunities for our children.

But let's face it: some things are just not going to be intrinsically interesting, nor will it be possible to make them interesting to everyone. While there are exceptions, most children find things like memorizing multiplication facts, drilling spelling words, or doing grammar workbooks to be rather meaningless in their lives. The relevancy is just not there, nor is it likely to be inspired, so we must apply the third form of relevancy—Contrived—and make learning into a game. Sometimes it's a very small shift. For example, "Find and underline all the prepositional phrases in this paragraph ... " sounds much like a tedious and useless chore. However, to say, "There are seventeen prepositional phrases in this paragraph ... here's a list of prepositions ... find them all, and you win!" is a whole different activity. I'm a boy and I really couldn't care less about prepositions, but I love to win, and if you set it up so that I can win, I'm much more likely to play your game—and possibly learn something about prepositional phrases in the process, especially since I'm happier to be doing it and therefore more receptive.

However, any game or economic system you may create as an external or contrived motivator must have two elements: It must be possible to win, and it must have both potential gain and potential loss. If the child believes (or comes to believe through multiple failures) that he cannot win, he will not play, and you will be forced to resort to the last and least effective form of relevancy. Therefore, he must know that it is possible for him to win, and this usually happens because of previous successes. Secondly, there must be not only a reward for winning, but also a penalty for losing. If we try to motivate only by offering a reward for effort, the child may decide that the prize just isn't worth the work, in which case you will be tempted to offer a bigger carrot, thereby creating a new game—one which you don't want to play—called "How High Can I Bid Mom Up By Continuing to Refuse Her Offers." If your game has only negative consequences, the child may think along these lines: "Well, I'll suffer if I do this, and I'll suffer if I don't, so who cares ... life right now is all about misery, so I'll just go eat worms and die." So whether you use computer game minutes, pennies, points, marbles, dollars, etc., there must be a potential reward for working and "winning," and a potential penalty or fine for refusing to do so and "losing." Contrived relevancy—usually in the form of a game—can be effective in motivating children to do hard things that they are not otherwise inspired to do.

The last, and least effective form is, of course, Enforced Relevancy. Unfortunately, however, this is the method we are most likely to use, as it is often what was used on us. The lecture often goes like this: "You must study and get a good grade on this test, or you will not get a good grade in the class, which will bring down your GPA on your transcript, and then you won't get into a good college, and you'll never get a good job, and you'll suffer misery and poverty your whole life—so study! Now!" As I noted above, this type of motivation can give the appearance of learning, but no real lasting learning is likely to occur. What has been retained long enough for the test will be lost almost immediately unless some other form of relevancy appears. It is also inefficient: I know some boys who can take ninety minutes and shed many tears before finally deciding to finish copying their short paragraph because the threat of "no dinner until you finish" (or some similar punishment) causes them to finally do it—but with a rebellious attitude and certainly a lasting dislike of the activity. However, most of those boys, given a time limit, and a potential gain if they can accomplish it before time is up, would be willing to forego the eighty minutes of procrastination, antics, excuses, and tears. Then the aftertaste of the task is one of lowered pain and greater success; willingness to do it again will grow. Therefore, we as parents and teachers should always try to avoid using the last and least effective motivator—Enforced Relevancy.

In summary, then, Relevancy is paramount. If something is relevant, it can be more easily learned; if it is not, everything is harder for both teacher and student.

Whenever possible, capitalize on Intrinsic interests, be Inspiring (or find people who are), Contrive a game that can be won, and shun "gun to the head"

Enforcement. In other words, "Inspire, not require."

Strive for this, and both students and parents will be happier, accomplishing so much more. In the next part of this series, we will discuss the Three Laws of Motivation, adding even more tools to your kit of best parenting practices.

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Part Two: The Three Laws



In part one of this series, we examined the power of relevancy in making learning easy and meaningful or tedious and temporary. Next, let us consider the three laws—one law and two corollaries, actually—which powerfully affect children's motivation. Like in nature, these laws are in constant operation, whether we acknowledge them or not, and to the extent that we understand them we will be better able to adjust our teaching for optimal results.

The first law is this: "Children LIKE to Do What They CAN Do." Really, it's true for all of us, isn't it? People usually like doing what they are good at. I like speaking to large audiences because I think I'm good at it. I enjoy doing what I excel at, and because I'm an adult, I try to organize my life so that I have plenty of opportunity to do what I can do well. Children are the same. As soon as a child can talk, he is likely to say "Mommy, look at me—look at what I can do!" All of us, young and old alike, naturally take pride (in the good sense) and experience joy when doing what we are good at, which makes it easy to improve, and we gain more skill as we continue to practice and refine the abilities we already have. This is the force that drives specialization—the natural inclination to work harder when we do more of what we already do well. Ask any child what they like to do and what they're good at and nine times out of ten the answers will be the same. Ability breeds enthusiasm and enthusiasm promotes ability, whether in math, art, music, sports, writing, cooking, or anything.



The second law follows logically: "Children WANT to Do What They THINK They Can Do." My son wants to jump off the roof because he thinks he can. I have no desire to jump off the roof because I am pretty sure I can't (at least without experiencing pain or injury). Fact is, he has successfully jumped off the roof, which means his "wanting" has now become "liking"—we just try to keep it a secret from his mother. I want to speak in a coliseum to 20,000 people (or more!). I haven't done that yet, but I want to, because I believe that I could do it, and do it well. Not everyone has such a desire—many people would be reluctant to give a 10 minute speech to a dozen people, so we can see how motivation and desire vary greatly, and are always very much connected with skills previously developed. Often we are motivated to try something new either because it looks fun, or we've seen someone else do it and be successful, or we can imagine being successful.

Some children (usually boys) tend to over-estimate their ability (especially physical) while other children (often girls) tend to under-estimate their ability.

Knowing that, however, is probably of minimal use, given the fact that they will be motivated to do something not based on our belief (or even certain knowledge) of what they can do, but on their belief (accurate or not) about what they can do, and often, no amount of convincing will work. Why? Because of the third law.

The third law is self evident, but critically important: "Children HATE—And Will Refuse—To Do That Which They Think They Cannot Do." And it doesn't matter what their real abilities are or what you think they can or should be able to do. I simply flat-out refuse to ever again in this life go snowboarding.

Why? I am absolutely certain that I cannot do it. How did I become so convinced? The last time I tried snowboarding, it was such a miserable, painful, embarrassing, wet, cold, frustrating, un-fun experience, that I am simply not willing to ever try it again. And because I'm all grown up, you can't make me! Nothing short of a pretty decent five-digit number with a dollar-sign attached could induce me to ever again get on a snowboard. Now what's interesting is my kids don't think I can't; they try to convince me, saying things like, "Come on, Dad ... it's not so hard ... you just need a little practice ... it's fun when you get the hang of it ... come on, just try ... we're sure you can do it if you'll just try" The answer is an absolute, "NO! You go to the snow with your mom, and I'll go teach a seminar. I refuse." Now call me a coward if you want, but I am simply not motivated to

do it, and I don't care.

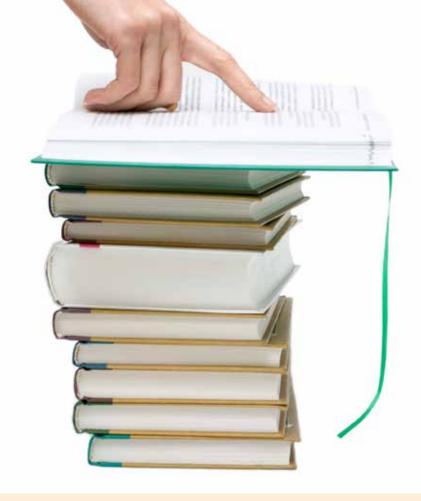


But how many times have we been on the other side of that conversation, trying to convince our child that if he will "just try" he'll have success, or she'll like it, or it will be fun. I would propose to you that for almost all kids, an unwillingness to engage in an activity is the direct result of past failure or frustration, and the consequent belief that they will not succeed. Any child who "hates" math is sure to dislike it mainly because of a record of failure and frustration, although what they articulate may sound more like: "it's boring," or "it's too hard," or "I just don't like it."

Let me interject right here a practical example. Imagine for a moment, a rather dyslexic ten year-old boy with low reading and writing ability. You would expect that spelling is also not a strong point or an enjoyable activity for such a child. However, by following the three laws when teaching it, you can have success and solid progress. First, start each session with a word that you know he knows well and cannot get wrong. Perhaps it's so easy that you'd think, what's the point of asking him to spell stick again; he knows it ... but that's the point. Because he knows it, and he knows that he knows it, he's willing to do it. He gets it correct. You thank him for doing it. Now, you would move to a word that is similar—so similar that he will believe that he can do it, perhaps brick. Success again. Then move on to stack, stuck, quack, maybe even haystack (assuming you know he knows hay), and pretty soon he's having a great time getting so many words correct. You move to the known (what he can do) to the familiar (what he thinks he can do) but avoid the entirely unfamiliar (what he thinks he cannot do), because if you suddenly threw beautiful at him, he would probably refuse, and no matter how much you tried to encourage him to try, he would probably be unwilling to do so because of his belief that he can't do it.

Certainly there is a range of aptitude from reckless to super-cautious, from carefree to perfectionist, but these three laws are ever-present and ever-operational in the human psyche. Therefore, if you wanted a perfectly motivated student, you would structure his day so that 60-80% of the time he's doing what he's good at and getting better, 20-40% of the time he's doing what he thinks he can do (and giving enough help for him to experience success), and 0% of the time asking him to do what he thinks he cannot do, and you would have a 100% all-the-time motivated student! That is, of course easier said than done, but it is an ideal to shoot for. There are, however, two large potential problems that would prevent our creating this environment. One is curriculum; the other is a type of wrong thinking about help.

C Children HATE—And Will Refuse—
To Do That Which They Think They Cannot Do.)



Curriculum, which usually has a "scope and sequence," is also more often than not affixed to a schedule. Typically, one must "get through" a textbook within a school year, or one "falls behind." Because of this, it is easy to fall into the trap of moving on to the next lesson or chapter before mastery has occurred. Attempting to teach division before a student has mastered multiplication facts with speed and accuracy is a sure recipe for frustration and disaster. Moving on to fractions before division is thoroughly understood will further compound the issue, and hitting algebra when fractions are fuzzy will unfailingly create an I-hate-math attitude. And yet, because some children need more repetition than others to master math facts, a textbook or workbook that gives a limited amount of practice may fail a student who needs more. Therefore, a workbook can only be as good as the teacher who supervises its use and does not allow a child to move on to greater complexity until what has been presented so far has been mastered. But grade levels and books with numbers on the cover make it difficult for the parent or teacher who feels compelled to "finish" the book on schedule. This problem is likely the root cause of at least half of the "I hate " attitudes that develop in kids.



The other issue that can hinder success (and therefore motivation) is the idea that it is possible to help a child too much. Suffering a hangover from our own schooling, we imagine that if we help a child "more than we should," then he won't be learning as much. In fact, many parents imagine that one of the better ways to help a child become competent and independent is to push them a little, and they will rise to the occasion because they will have to "sink or swim." Although this may occasionally appear effective, the truth is that, more often than not, a premature push to independence can be a fatal error. The expression "sink or swim" is an incredible misnomer; no one learns to swim by this method! If you did try this approach to teaching swimming, your child would either die or be deathly afraid of swimming the rest of his or her life! Instead, what do we do? We give plenty of help—even "too much"—because true independence in swimming (or in anything) results not from being pushed but from acquiring a critical mass of information, experience, confidence, and success. You may actually nurture independence more quickly by trying to help "too much" than if you try to avoid doing so. Truth be told, you can't help a child too much even if you want to. Why not? Because they will always tell you when they don't need help! They are kids—they're wired to become independent, and they will, at some point, inevitably say, "Okay, Mom, I've got it ... I can do it myself ... all right?"



Although we, as teaching parents, will always face some difficulties in getting our children to do things they don't want to do, by reflecting on both the importance of relevancy and the three laws of motivation—that children like to do what they can do, want to do what they think they can do, and hate to do what they think they cannot do—we should be able to optimize our instruction and tweak our teaching to maximize motivation.