

DAVID BOULDING

FETAL ALCOHOL CONSULTANT

Chapter 12

How Outdoor Education Prepared Me to Teach Judges about Fetal Alcohol

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I want to talk about the confluence of outdoor education, judicial education, and fetal alcohol. These topics are connected. Outdoor education has helped me explain fetal alcohol to judges.

Writing words on a page differs from speaking to people in a room. I cannot see you, or make eye contact, or encourage you to ask questions if something I say puzzles you. There are no diagrams, illustrations, or body motions, or voice inflections. You are on your own with a text, so you bring all you are and your context to create meaning. This process of context driving meaning is what happens when judges read scholarly paper on fetal alcohol. My experience is that scholarly papers on this subject have no positive effect on what a judge will do with a fetal alcohol case. Fetal alcohol has become a legal topic like theft or murder, but is not like theft or murder because we are talking about humans charged with a criminal offence and about their brains that are missing pieces. People with fetal alcohol are not like you, and they certainly are not like judges. They make mistakes where we, the complete brained, would not. We need to go deeper and find the common bond, the common knowledge.

While working at Strathcona Park Lodge Outdoor Education Centre (SPL) in 1973, I would take youths on overnight

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hikes, canoe trips, and other outdoor activities. About 400 metres south of the SPL site was a 60-acre sphagnum moss bog. The bog and its surrounding forest had a rich sampling of the various kinds of natural biological zones: several types of forests, streams, ponds, lakes, rock slides, logged-off areas, and some old growth timber. SPL designed a 3-to-4-hour program called a “bog walk.” The walk meanders through different biological neighbourhoods, and the children experience a wide slice of Vancouver Island. They learn varieties of plants by gathering leaf samples, tasting trees, noticing small things. The mantra is “Notice small things, get better information, then you will make better decisions.” In geological time, a bog is halfway between a lake and a forest. The bog was named the Sundew Bog after the insect-eating plants found in the middle. With the luck of location, SPL had a 10,000-acre natural history museum next door. The activity was called a “bog walk,” although sometimes it was also called a “shelter-building exercise,” or a “search and rescue game.” In the 1970’s, the outdoor leaders were measured by the creativity and joyous energy they put into their bog walks.

Leading bog walks, I learned that eye contact and encouraging questions allowed the youths to get the bog walk experience they wanted, a bog walk that worked for them, not the just the one I had prepared. I learned that each bog walk could be different depending on who was in the group and what the school principal saw as a requirement. I learned that I could cover the required material and still respond to each group differently and give the children an experience they would never

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forget. The point of the exercise was not about rattling off the English and Latin names for the 75-plus different bog plants, although some teachers wanted that kind of taxonomic overload. To accomplish this massive name-calling, we organized the plants in families, or neighbourhoods. I learned to make my bog walks physical with some exertion because body learning differs from classroom learning. I learned that body-felt experiences from a bog walk could complement the children's biology classroom learning, much like Chinese medicine complements Western medicine.

About 25 years later, I began a career teaching, writing, and public speaking about fetal alcohol and the law. Like most first-time teachers, I read my first paper to the audience. After some months on the fetal alcohol conference circuit, I realized I had to change my lesson and to try something different. Slowly, I absorbed the lessons I had learned from the great teachers in my life and the books about education that they suggested I read.¹

Now in 2015, I can see a consistent intellectual path, and I offer this paper to explain my success with a topic that confounds the legal system. It tends to label "difficult people" as "mental health people," or "mental health cases." My clients have incomplete brains. The standard legal process that works well for you and me fails them, and the failure is ours. We need to design a better system. My clients brains' do not change. Time in jail does not create new brain cells.

The disabilities of people with fetal alcohol are often described by the mnemonic ALARM.²

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'A' stands for the adaptive behaviours they sometimes lack. Adaptive behaviours are the life lessons we absorb rather than those we are taught. It is cold, put on a hat. At a funeral, do not ask the widow about the Stanley Cup playoffs. Some words, generally derived from Old Anglo- Saxon, are used only in narrow specific social circumstances.

'L' stands for language and learning. There may be blank spots in the learning of my clients, whose language often seems to be above their learning. Lawyers hear this kind of language continually. Their fetal alcohol clients overload their language with legalisms they have heard, like *mens rea*, "indictable offence," and "specific deterrence." They have no idea what the words mean, yet they know these words are important to lawyers, so they use them to create close relationships with their lawyers. The problem is that the lawyers then fail to see the cognitive disability and assume that their clients understand legal terms.

'A' stands for attention. Often, people with fetal alcohol have limited attention and are easily distracted.

'R' stands for reasoning. This faculty is impaired. These people have difficulty generalizing, abstracting and predicting, and miss many social cues. For example the injunction "Do not fight in the playground!" does not get translated to "Do not fight on the way home." People with fetal alcohol often cannot abstract, generalize, or predict about social situations.

'M' stands for memory, the foundation of all cognitive skills. When our parents have Alzheimer's, we expect memory loss. We do not expect a 27-year-old to have similar memory difficulty.

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Whether short term or long term, this impairment is often devastating and creates huge legal problems. Some hours after an arrest or when in front of the judge, the offender is clear: s/he knows that an act or behaviour is wrong. However, when his new friends ask him to come behind a drugstore at 1 AM to help load boxes for 20 dollars, s/he might not process all the facts. S/he may focus on the delight of having new friends who want him to help them. He may see the invitation as a powerful statement of fact: "I do have friends."

Legal professionals use this ALARM mnemonic to teach police, as a few questions in these domains help police officers begin to assess a person and can help in identifying a brain disability. The positive qualities of people with this permanent brain-based disability need to receive more attention. Most people with fetal alcohol are visual learners. While they may not read well, I have had great luck with fetal alcohol clients when I ask them to draw a diagram explaining where they were when the police say the crime happened. These clients have great connective social skills. Pay a little attention to them, and you have a friend or client for life.

While I have found that my clients have sensitivities to touch and are slow cognitive processors, they are quick to smile and eager to please. I have learned to talk slowly, avoid dense legalisms and use a light touch. The one-minute handshake is the best way in, while maintaining eye contact and giving them the physical information that you are interested in them. I had to learn to jettison the standard legal advice lecture. Sometimes a

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physical experience can create a connection where words fail. A simple handshake begins with permission: the outstretched hand. Then the grip, the eye contact, the slow movement, and complete focus on the other follow, and, in a few moments, a relationship begins. The quiet physicality seems to work with my fetal alcohol clients. While I learned during bog walks that everyone wants to matter, I took some years to apply this learning to the topic of teaching judges.

I have learned that bog walks and teaching judges successfully about fetal alcohol are connected because complementary learning works. Judges I have taught have started asking the main question: “I would not do that in those circumstances, so what is going on in that brain?”

I have a similar choice here. I am writing a paper for professionals. The readers here are exceptional and can easily consume vast numbers of pages. These readers’ intellectual skills are high, and interest is keen, but I have found I must make adjustments if my message is to be understood. My middle sister with her freshly earned PhD insists that I cannot write any sentence here unless I quote the relevant peer-reviewed research, properly footnoted. She would make an excellent appellate lawyer. My youngest sister, who has been practicing Traditional Chinese Medicine (TCM) for 30 years, tells me to “be personal, connect, and bring myself and my various experiences” to this paper. There are few footnotes here. I am asking you, as readers, to withhold judgment about this material until you have thought about my ideas about education. Later, after reflection,

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you may disagree. If you at least consider them, perhaps as an invitation, as a proposal, as a possibility for a few minutes, I will have succeeded. I am offering a view of judicial education called “experiential education.”

The relation of fetal alcohol to the law is a key legal problem. We expect judges to help solve our social issues. Often they do because Parliament refuses, as the history of abortion law demonstrates. Judges decide and, by definition, give reasons for the judgments. The *Canadian Charter of Rights and Freedoms* in section 52(1) requires judges to answer the questions we send them in our legal disputes by using a constitutional law process. This involves using a reference to the *Canadian Charter of Rights and Freedoms*. Our *Charter* is clearly one of the world's finest and most modern constitutional documents, a gift from Pierre Trudeau. Judges have the power to decide if a law is constitutional or not. They can decide if something is a legal right or not. For example, should fetal alcohol be a mitigating or aggravating factor in a criminal sentence, or does a nonviolent person with brain damage require jail as a sentence, or does fetal alcohol require different standards of mental intention?

Here are some questions about fetal alcohol that judges should consider: (1) What did you intend your actions to do? (2) What were you thinking? Were you thinking? (3) When were you thinking that? Before the action, after, or after arrest? (4) What is thinking? What is thinking like for you? (5) What are the legal expectations Canadians have of persons charged with a criminal offence when we know that the brain of

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a person charged with a criminal offence is missing pieces? (6) How do we make legal rules about brains, about thinking? (7) How does law include science? (8) How much brain science information do you need to make a helpful decision? (9) Helpful to whom? and (10) Can decisions be revisited when new info becomes available?

I do not have the answers. This paper suggests a way to begin this perplexing discussion by changing how we educate judges. My point here is that judges need to see fetal alcohol from the point of view of the person with fetal alcohol. In all other cases, that is what the law does. The judge says, "I would not do that because..." and then the judge tells us his/her thinking. S/he gives reasons. We call those reasons the judgment of the court and it becomes part of what is called the "common law."

The common law in Canada incorporates Greek, Roman, the Canon Law of the Catholic Church, and all the Norman and old English Law, as well as all the old cases from English courts, from the Sheriff of Nottingham to the decisions of the House of Lords. Common law is a massive collection of legal judgments. My point here is that the common law is not common, or shared, with people with incomplete brains. The common law seems to be exclusively designed for people with complete brains, and such a design is not fair.

We have made curved slopes in our concrete sidewalks for people with wheelchairs. We have interpreters for the deaf and almost every language heard in Canada in court. Canadians offer many accommodations in law to achieve fairness. Aboriginal

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people now get Gladue reports. Gladue was an aboriginal person found guilty of a criminal offence. After appeals and much legal discussion, the criminal law has been changed. When an Aboriginal person is facing a judge in the penalty phase, at sentencing, a probation officer prepares a report, named after Mr. Gladue, detailing his Aboriginal background, his culture and other relevant information that a white judge might not know. Finally, after years of aboriginal people overloading our jails, Gladue reports are a common everyday experience in our criminal courts. People with fetal alcohol need similar reports detailing their incomplete brains.

Children get special help with screens and videos in sex assault cases so they do not have to face the person accused of hurting them. Older people with Alzheimer's are rarely charged with crimes. Fairness is the foundation of our *Charter*, and judges are given the role of deciding what is fair in Canada.

I believe all Canadians want our legal system to be fair. Making it fair is going to be difficult. Our judges are selected from the top one percent of an elite profession. How do you give a judge the experience of having an incomplete brain? I have some suggestions. My success with this experiment in experiential learning is due, in part, to what I learned from Outdoor Education.

Before beginning an English Literature and Native Studies degree at Trent University in 1977, I spent some years hiking, climbing mountains, and kayaking at Strathcona Park Lodge and the Outdoor Education Centre (SPL) on Vancouver Island. Then I completed a Master's degree in modern poetry/rhetoric before I

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attended law school. Since 2001, my law practice has been restricted to writing, teaching, and speaking about fetal alcohol and the law.

While I received my outdoor education at SPL, I needed university. Ezra Pound to Carl Rogers and all the subjects in between have been necessary for me.

In my experience, high school (1967 to 1972) and law school (1984 to 1987) teach students that the only learning that matters is in the head, or in your brain. Marks measure your learning, describe your success, and dictate which law firm will hire you. For me in 2015, common knowledge, collective knowledge and experiential knowledge have value also.

Because outdoor education is fun and usually done in a group setting it promotes a connection to the natural world and to others. Outdoor education requires exertion, movement, and noticing small things. Outdoor education fosters healthy personal relationships and positive connections with peers as the students are engaged in the various activities as members of a group. The style of outdoor education taught at SPL emphasizes creating connections with self, others, and the natural world as opposed to overcoming or conquering Mother Nature. My world has room for a wide range of outdoor education styles. For me, they are not about right or wrong, or good/bad, but about your philosophy, your view of the world. I think if I can give a judge a physical experience, and not just a scholarly experience, we can do more together. Go further, go deeper, go where no one has gone before and find the common bond we all share.

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A specific function of outdoor education is building confidence. Outward Bound (OB) is a worldwide leader in outdoor education. Beginning in 1941 and for the next 50 years, every OB program had an activity on their residential sites, or camps, called the “confidence course.” Now every outdoor education center in the world has such a course in their program. Sometimes the activity is called a “challenge course,” sometimes it is called a “rope course.” A thick rope is strung up between trees 10 to 20 feet above the ground. The participants are encouraged to walk across the rope to get to the next tree, to the next element of the challenge course. Sometimes a log replaces the rope. There is no problem when the log is on the ground. Everyone can walk the log. Hoist it up 15 feet, and everything changes. The challenge is physical, not intellectual.

The theory is that if you can walk the rope or walk the log up in the air, you will learn, in the body, to have more confidence in your life. You have had an experience in your body that you can rely on later. You will create a frame of future reference. Sometimes participants find it difficult to walk that suspended rope or log, and a skilled outdoor leader can help the students in the challenge course by working to create personal confidence. The theory is that the experience of building confidence by walking the rope or log gives the learner a successful experience, a warm feeling in the body. This experience can later be called on to create success in other areas of life. I believe the body memory of success has value, not unlike knowing the multiplication tables or reading.

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Outdoor education is also about problem solving as a group. For example, there is the rule that when we hike in the mountains, we travel at the pace of the slowest member. Most outdoor education centers provide a series of activities stressing problem solving: Who cooks over the fire? Who checks that the canoes are tied and secure for the night? How do we all cross the river safely? Who partners with the less physically able students? The list is long, and the benefits follow students for life.

In society, we are always faced with similar difficult problems. Sometimes, we seem to be powerless and unable to find our way towards solutions. Some problems we cannot fix. In outdoor education, we often look for the easy way up steep mountains. The successful leader can show students that some mountains are too much for this group at this stage of its members' learning. Often, this speech spurs one or two students to change their lives and become dedicated lifelong mountaineers. These are the people who later climb successfully in the Himalayas, in Patagonia, and the steep mountains in the Rockies. Some problems we can fix. Deciding which is which is difficult.

Discernment is difficult to teach. Discernment takes time to learn and considerable brain power. Discernment is a high-level brain skill. This skill is often not available to people with fetal alcohol, but we, the complete-brained, think discernment is "just there" as if we all have it. We need to learn that the ability to discern is something most people with fetal alcohol do not have and may never have.

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Section 19 of the *Criminal Code of Canada* codifies this belief in discernment. Everyone knows this basic law because the section says ignorance of the law is no defense against a criminal charge. We, as Canadians, assume all Canadians know this fact in their bones because we share a common social stock of knowledge. We may not know the intricate aspects of trading stocks and bonds, but we do know that cheating is wrong. We know punching, kicking, and using certain chemicals in our bodies are unlawful things to do. On the one hand, these criminal rules of behaviour tend to be explicit and are discussed, displayed, and dissected in various media all the time, so a relationship exists between being able to discern and being able to remember. If your memory fails you in moments of stress, you will make mistakes. You will forget the basics we take for granted.

On the other hand, wisdom is different. Wisdom is usually reflective, like hindsight. Wisdom is something we all know about. All of us can discuss wisdom. Wisdom is more than a cognitive item. Wisdom has an ineffable, timeless quality, and a relation to human potential. Literature, painting, ballet, and some of the pithy stuff your mother told you contain wisdom. You see the wisdom problem on display with people with fetal alcohol. After being arrested and sitting in a police station or in the back of the police cruiser sometime after an offence has happened, almost all people with fetal alcohol either confess or tell the officer what happened and can say they know that what they did was wrong. This “knowing” admission is always used against them. Later, they can say their actions were not correct, not wise.

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Sadly, this wisdom, this awareness is not available at the moment they commit a criminal act. We, with our good memory machines in our complete brains, shake our heads and say: “Everyone knows...” To us, this wisdom is obvious and available in our brains, ready to be applied to each set of circumstances. We take for granted many of our cognitive operations.

Then there is legal wisdom. I am reminded of Louis Armstrong when he was asked to define jazz. His answer went something like “I know it when I hear it.” Legal wisdom is often clear only years later. We need, it seems, to thrash around before we agree on what is legal wisdom. Eventually we agree. Women voting, the ban on the death penalty, and legal medical marijuana are three topics that seem obvious today, but were not so in their time. Time, then, is always an issue.

Time is up. Fetal alcohol has been good science since the early 1970's. We know the cause, and the difficulties are clearly set out. Something has to change because too many people with fetal alcohol are in jail. This situation is wrong and might upset Canadians if they knew about it.

Until recently, fetal alcohol was not conceptualized as a problem. Diane Malbin, the great fetal alcohol educator, once or twice told me that her PhD supervisor had a rule about social work: No solution, no problem. Diane explained that in social work, until you can give the decision makers a solution, they do not see the problem.³

Fetal alcohol proves this rule. Until we can give judges a solution, fetal alcohol is not a problem they can solve. They have

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blunt tools: jail or no jail. The readymade solution of jail and more jail is urged on them by Crown prosecutors, since the brain damage is permanent. Prosecutors want public safety. They use jail as a cold storage facility. Jail does not create new brain cells, or raise cognitive abilities. Jail, if anything, is a good training ground for more crime, more jail. The problem is a social problem, so that we are all involved. We, all of us, need to ask, I would not do that, so what is going on in that brain? What is it like to be alive with a brain that is missing pieces? The answer to these questions are a lot to learn. The process has taken me years, and I had lots of help.

I have learned from outdoor education that passion for the material is more important than performance on exams, or than knowing the Latin names of all the forest or bog plants. Passion is in the body. I can feel passion's excitement. I vibrate. I am hot. When you see youths complete a rope course, you can sense, often hear, and see passion. When young students stoop to watch the sundews glisten and eat bugs, they are paying attention with every cell in their bodies. That is passion. Obviously, lawyers need to know the law, and law school exams are required. That the Law Society of BC has several qualification courses and tough exams is equally a good thing.

I believe passion and learning are body-felt experiences. I believe passion and feeling propel learning. Feeling is the body expressing itself in concrete ways: you feel hot, warm to cool, or cold. You sweat or shiver. You vibrate or are still. When you see a shaking youth complete the ropes course, and he or she gives you the megawatt smile of success, you know the child has been

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marked for life. This child now has a body experience of success, and this feeling of success is always available to the child. The theory of outdoor education is that this experience will be used later positively in the children's lives. When teaching judges, I aim to have them remember the experience in their bodies with either a smile, or a shiver.

Some years ago, I had the pleasure of teaching some 20 senior Royal Canadian Mounted Police (RCMP) from northern British Columbia about fetal alcohol during a two-day course. Really, it was a one day course. The RCMP realized that to sell this course, they needed to have spouses come to Vancouver for a shopping holiday, so the course was Thursday /Friday, leaving all day Saturday for a holiday and Sunday to fly/drive home. On both occasions at about 2 pm Friday, I noticed the older policemen tilting back their heads and mulling over something. Then some of them would ask questions about old cases. They were trying to figure out if some person they had dealt with years ago had fetal alcohol.

One of the topics in this RCMP course is brain science. Professor K. Sulik is an embryologist from the University of North Carolina (Chapel Hill), the Bowles Institute for Alcohol Studies. She is the world leader in brain imaging. Her pictures are available on the Internet, showing the damage alcohol does in utero to brains. When we showed the brain-imaging pictures of mouse brain damage from Professor Sulik, many police would tear up. Then the concept of brain damage struck home in their police brains. Then the police began to understand fetal alcohol.

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They all knew the bad behaviour. No news there. The combination of remembering old cases and seeing some science caused the tears. Then the law enforcement men began to see fetal alcohol as a brain-based permanent physical disability. They saw the brains of people with fetal alcohol were incomplete. I believe if we can educate through pictures and tears tough old Staff Sergeants in the RCMP, judges will be easy to teach.

This lesson that learning also occurs in the body, and not just between the ears, I learned at SPL in 1972. After a winter apprenticeship, I was told I was an outdoor leader. I was changed forever when a senior instructor, Marcy Wolter, gave me the slim volume entitled *acclimatizing* by Steve Van Matre. His 134-page book synthesized everything SPL taught.⁴ I learned I had to find ways to engage children, to bring their bodies into the learning. I had to get their feelings up and out there. When I explain fetal alcohol to judges, I engage them physically as I did children during bog walks.

Steve Van Matre changed the outdoor education paradigm, put life into the outdoor education process. He took inner-city children from Chicago and walked them chest-deep through swamps, had them tasting trees, and made them face webs with spiders, demonstrating that outdoor education could be experiential, fun, and life-changing. He privileged the excitement of passion, experience, and learning in the body over physical skills, endurance, competition, and conquering nature.

I was dropped into the maws of judicial education in November 2000. I was a criminal lawyer in Vancouver, and Judge

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Carly Truman phoned to say she was organizing a fetal alcohol conference in February, and she wanted me to participate.

In February 2001, I found myself on a panel with Mr. Justice David Vickers, Judge Carly Truman, a parole officer, a probation officer, and a woman married to an inmate with fetal alcohol in front of 1000 to 1200 paying learners: mostly social workers, probation officers, a few doctors, and some parents.

The probation officer spoke first. Over the years, she had adopted several young people with fetal alcohol and had to stickhandle through the legal system with one foot as a probation officer (a sort of court-appointed parent), or as a set of eyes on children in trouble for her local judge and another foot as an adoptive parent with her own children in and out of jail. Her story and her presentation were crisp, fact-based, and tearful. She emphasized her children made the same mistakes over and over again, and the judges kept expecting them to learn from their days in jail. She was a kind woman who showed a wistful sadness at the failure of judges to see the children as she did. She knew they were different and that they would never be like her in some ways.

The federal parole officer told horror stories of people trapped in the federal system for infractions like stealing chocolate bars followed by a series of “not getting it” offenses. These offenses are usually failing to report to the probation officer, failing to follow court orders, failing to follow no contact and no go orders, and various breaches of other probation terms. A second set of offences I call ‘having bad friends’ also plagues

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people with fetal alcohol. These individuals continuously get caught, but the instigators, the planners, the organizers rarely do. After repeat convictions, judges demand compliance. Judges want people to “get it” because a judge’s duty is to create and maintain public safety. Judges want the convicted offender to learn from their time in jail so eventually judges usually give those people who consistently do not “get it” federal time which in the Canadian legal system is more than two years in jail. Then while in a penitentiary, people with fetal alcohol fail to follow prison rules (over and over again) and get more time in jail.

The woman who followed the parole officer was married to a fellow with fetal alcohol, who was now in a federal penitentiary. She talked about how the system did not understand that his brain was different and was missing pieces.

I was next. Some context may assist. Judge Truman had a pre - conference group telephone call about a 6 or 7 weeks before the conference.

Everyone on the panel, except Mr. Justice Vickers, was involved in the group phone call. Everyone was conversing about fetal alcohol, about their presentations, but I was silent. I had learned about fetal alcohol only a month earlier. The head of Vancouver’s probation office for sex offenders, the wonderful Bill Ellis, took time out from shoveling soup into his mouth in the courthouse café to tell me, between gulps of Greta’s soup, that my client “probably has FAS.”

The term “fetal alcohol syndrome” is old taxonomy. Now we use an umbrella term, “fetal alcohol spectrum disorder.” Under

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this umbrella are four discrete diagnoses. This system of names is changing, and by the end of 2015, we will have a different system as the science gets better.

Like in cartoons on TV, the lights came on with a bang for me when Bill said “fetal alcohol.” I had never heard the words ‘fetal alcohol’ before. I had been in criminal courts since 1985, but my ignorance limited my contribution during the conference call to “I do not know anything about this; it seems all I do is make mistakes.”

To her credit, Judge Truman was kind to me. In that special slow voice adults use with young children, she said: “That’s okay, David, you just write about your mistakes.” Immature. So I did. In 20 minutes I wrote the paper “Mistakes I have made with FAS clients”.⁵

I stood up smiled and read my paper. About halfway, I had to stop as I was tearing up. Embarrassed, I looked up and saw that most of the people in the audience were also crying. The previous speakers had created an emotional tsunami. The effects from the previous speakers and the content of my paper were upsetting, and emotions came out. Let this reaction sink in.

I was in a room with over a thousand people, who were mainly professionals and most of us were in tears. After I was done, Judge Truman gave a learned account of where the law on fetal alcohol is today and spoke of her experiences as a judge in the local provincial court.

Then the showstopper stood up. B.C. Supreme Court judges are to be invisible. We expect our judges to show up only

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while in court. Not Mr. Justice Vickers! For all his professional life, he was a wonderful tireless advocate for mentally challenged, disadvantaged, and disabled children.

He gave a blistering attack on the legal system, the political system, how we train lawyers, how we train judges, how we train police officers and corrections staff, and how little society values children. This presentation was a barn burner, and people stood and cheered when he sat down. Every word rang true with the audience. Passion can move people to emotional places. Listening to David Vickers was an emotional equivalent to watching Paul Henderson score the goal that beat the Russians in 1972. The B.C. Supreme Court Judge had the courage to open his heart and get personal with 1000 people. He created an emotional connection with the crowd. It was as if everyone was part of a single body in that convention hall. People were cheering.

After his speech, I spent years brooding before the full significance of that day and all that had happened became useful to me. I now know passion is not enough. I must bring myself and all my energies forward, on view, available, and be personal. I must show who I, am and when I do so, I can create a connection with others, and we can quickly get on the same page, and be as one. Experiential learning has an emotional, a feeling component.

When I talk these days about fetal alcohol with judges, I do not use the law school case study method: "Here, read 10, 000 pages of Court of Appeal cases and learn the law;" nor do I rely on the successful method of continuing legal education programs

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(panels of lawyers who provide learned papers and in 6 minutes present an oral précis). These methods fail when addressing fetal alcohol because the topic collides with several sacred legal cows. Being personal is unacceptable in law courts. As lawyers, we are to be dispassionate, composed, detached, and professional. Emotion is forbidden. We are trained to avoid the word “I.” We are forbidden to call someone a liar. We must suggest s/he is “mistaken,” or “not fully truthful.” We are required to uphold the old English traditions of the aristocracy, so we sink to euphemisms. Raw language and emotion can be a cause for discipline by your law society.

To discuss fetal alcohol by writing a scholarly paper would require using pages and pages to deal with several assumptions in law that are foundational, almost unassailable. The exercise would exhaust readers. As a result, I see a legal system today that chips away incrementally at fetal alcohol to make small changes. To me, this process is like sticking band-aids on open fractures.

Here are some problems.

In law, there is no “little bit of” guilt. Guilt is either all or nothing, as set out in the rigid *Criminal Code of Canada*. Guilty or not guilty are the only options available. No one receives a verdict of “innocent.” Ask yourself, “Why not”? While the answer is complex, most of the answer is something like the following: because the rule of law is not for an individual’s benefit, it is for public safety, for order, for social stability. Law is a blunt utilitarian tool. We sacrifice individuals for the greater good. Law herds some of us into pens so the rest of us can live in peace.

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In law, we are assumed to all have the same brain abilities to understand the law. In Canada, section 19 of the *Criminal Code* states that ignorance of the law is no excuse. We are our brains. If you have a brain that gives you an emotional age or maturity age of 12 to 14 and a chronological age of 27, how can we be surprised when you choose “illegal” sex partners of the same age range as your emotional age?

In law, we are all assumed to understand the consequences of our actions, the cause and effect we have as social actors. A crime of passion or provocation is not a part of a Canadian legal defense to a criminal charge. Every boy learns this fact when his mother tells him to not hit his sisters even when they call him nasty names. I know this. I have four younger sisters, and one is lawyer.

If you lack the social regulation skills to delay gratification (I was angry when he called me stupid, so I hit him), you will go to jail. If you fail to know enough to walk away from trouble, you will go to jail. If you fail to learn to manage emotions (“Mom! David is calling me stupid again, so I hit him”), you will go to jail. If your brain processes information slowly or comes to inappropriate conclusions, the law has difficulty processing you. We focus on behaviour, perhaps obsessively, and choose to ignore the brain and the limits of some brains which are missing pieces.

Sadly, the law is not to be blamed entirely: we really know very little about brains, and what little we know seems to be unacceptable to Parliament or to most judges. Judges need to know more brain science.

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Canadian law does not handle false confessions well. People with fetal alcohol give false confessions regularly. One famous case involved a young man named Gabe Baddeley. In return for sandwich, he gave a false confession: he was hungry.

If you are interested in reading the transcript of this false confession, the University of Washington in Seattle, a leading center for fetal alcohol scholarship, has the complete interview on its website. To find this website, I suggest you Google “FADU,” short for “fetal alcohol and drug unit,” and the third or fourth item that pops up. The University has a long and complex URL that no human can remember correctly. Surprisingly, the police officer comes across as a tremendously decent chap. Nine months later, the real culprit confessed.

After eating and confessing to the kind policeman, Gabe asked to go home. This request is an example of not getting it, of a brain dysfunction. Everyone knows you do not admit to burning down a school and then expect to go home for dinner. Gabe’s brain had learned to please people. Tell people what they want and your life will be easier.

In law, we have no way to incorporate modern brain science when it conflicts with the McNaughten rules we inherited from the House of Lords over 160 years ago.

I relish explaining the McNaughten rules because they encapsulate the best and the worst of our legal system. McNaughten was a deeply disturbed paranoid schizophrenic. He wanted Scotland independent from English rule. He travelled to London, aiming to shoot the Prime Minister. He missed and shot

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to death the PM's secretary. An English jury found him not guilty by reason of insanity. The House of Lords was not happy. On its own motion, the House of Lords reviewed the trial evidence without the messy Mr. McNaughten. Experts testified, and a report was issued. The report aimed to make sure this catastrophic wrong, this getting away with murder, never happened again and sought to clarify the law on insanity. Every democratic nation has the McNaughten rules in some form as the basis for its criminal law, the law on the mental requirement for a finding of guilt. Lawyers call this component *mens rea*: the guilty mind.

Here are two small issues. The report was written 12 years before Sigmund Freud was born, and there were no such things as MRI, Pet scans, X-rays, or blood chemistry analysis. No brain science was introduced as evidence. Careful readers will detect that the law has an elitist tinge and changes at a glacial rate. Stripped down, the McNaughten Rules say: if you know you have done wrong, we can hang you.

When did you know it was wrong? How did you know it was wrong? What is thinking? What were you thinking? and similar tough questions are not addressed. Thus, we are left with a set of legal rules about mental abilities, intellectual intentions, cognition, and an understanding of brains that is 175 years out of date.

We smile and are surprised when the post office gives us a letter with someone else's name and address. Using the ALARM mnemonic, consider a brain that has processing difficulties,

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memory problems, attention issues, and reasoning flaws. People with brains that are missing pieces will make mistakes, often the same mistakes over and over again.

In law, we do not allow for any special circumstances or exceptions. For example: “He was overstimulated, overwrought, and reacted, instead of carefully considering his options.” “He cannot see that there are others in the class.” “He just does not understand, in the moment, that he must follow the rules.”

In Canadian law, courts rely on jail and have to be prodded to use probation, parole, community supervision or service, diversion, cautions, or second, and third, and fourth chances. Many Canadians are conservative and like jails, especially for criminals. Politicians cater to this cruel bias. Readers familiar with the struggle between Stephen Harper and the Supreme Court of Canada are aware of the retrogressive positions of the current Parliament. All suggested fetal alcohol amendments to the Criminal Code have been defeated on party lines in committee. This error never made the front page of the *Globe and Mail*.

Daily in criminal court, this problem of what to do with incomplete brains is reflected in an all too common situation. A defense lawyer tells the judge the client has fetal alcohol. Then the judge hears it is a brain-based permanent physical disability with no cure. Most judges, and too many prosecutors, think the correct response is “more jail time.” The result is that, in our expensive jails, we have too many people who that are no danger to public safety, and many of them have fetal alcohol. Fetal alcohol is a permanent brain-based physical disability like having

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one leg, or being born blind. We need to make accommodations, or as Diane Malbin suggests, try something different, rather than trying harder.

Fetal alcohol is as different from all other aspects of law as studying the Schrodinger equations⁶ are, and as different from learning to build a fire in the west coast rain. To be fair, we need to consider the brain and not let our focus be restricted to the deviant behaviour. We need to establish different legal rules when people with incomplete brains are arrested.

This brief list is intimidating. These are not small problems. They challenge the foundations of law.

Now when I speak to judges, I use what I learned from my years in outdoor education. I have learned that small experiences with emotional content can produce significant changes.

Perhaps the best judicial lesson ever given on fetal alcohol and the law was administered in Edmonton on April 8 of 2008. I was seated with four judges at a round table. In the meeting room, there were about 75 lawyers, about 10 - 15 judges. The psychologist was Karen Serrette, PhD. On deck was K. Sulik PhD, an embryologist from University of North Carolina, the Bowles Institute for Alcohol Studies.

The psychologist had a team of 6 or 7 grad students to help her. The students passed out elastic neck bands that fit too tightly, paper party hats that were too big and sloppy and fell over the brow on to your nose, and those funny gag glasses where the eyeballs fall out when you move your head. We were given pencils and a piece of paper. Then the students walked

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around the room carrying three boom boxes playing loud heavy metal music.

Then the psychologist over another loud speaker gave the audience an easy ten-question test on basic Canadian geography.

No one at my table finished all ten questions. One judge threw down his pencil at question number four. The scowling judges, all men, were infuriated and said so. They acted as if someone had dropped a high school stink bomb at their daughter's wedding. They were more insulted than cognitively challenged.

Then in the silence, we were instructed to take off the neckbands, the funny hats and glasses. The psychologist said: "That is what it is like to live with fetal alcohol." This demonstration was pure Steve Van Matre: it was experiential education.

Next Dr. Sulik gave a learned lecture in pictures. For 25 years, she has been feeding pregnant mice drops of alcohol. Then she slices the brains of the baby mice and takes pictures of the damaged brains. Dr. Sulik has created a day-by-day brain atlas. She can create, on demand, the birth defects of fetal alcohol. Her pictures are sobering. I use them every time I speak because the pictures, scientifically, show that the brains are missing pieces. Very few words are needed. Dr. Sulik shows you a mouse with brain damage and then shows you a picture from the files of Children's Services and the facial features of the mouse and child look nearly identical. She explains that she created this brain

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defect by giving the pregnant mouse a certain amount of alcohol at a certain time in the mouse's pregnancy.⁷

I can only imagine what was boiling inside the minds of those judges. None of their learned legal training was mentioned. No one mentioned any cases from the Court Of Appeal, the Criminal Code, or even a courtroom.

The legal education program was designed to humanize, or, as Steve Van Matre would say, "acclimatize" the judges to the reality of a world they did not know.

When I speak to judges, I emphasize play, fun, and, especially, the game of follow the leader. Outdoor education in many ways is a giant game of follow the leader.

In outdoor education, we make learning fun, we make it a game. I ask the judges to use both their hands and put their thumbs and first fingers together making a triangle. I tell them everyone in this room has a complete brain like a solid sandstone pyramid 99 floors high. The triangle represents the solid pyramid, their complete brain. I make sure everyone has their fingers as a triangle. I emphasize something something solid, like rock.

I say, "Everyone here has a brain like a solid sandstone pyramid with an elevator that goes to each floor, and in certain conditions, we have express elevators that rush to a preselected floor."

I make sure everyone in the room uses his or her fingers to make this triangle. If someone does not play along, I cajole or use the grandfather voice and say, "Do it!" Often, I find out who is the most senior judge/lawyer and say, "Judge Smith is doing it, so

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play along.” Peer pressure works, especially with people in hierarchical organizations like courts, prisons, and the military, or a paramilitary organization like the RCMP.

Then I use my fingers to make two interlocking circles and have the judges follow along. I say, alcohol does two things...kills brain cells and also connects brain cells to the wrong brain cells. I also say at the end I can provide the references to all the science. The judges rarely ask.

Thus, fetal alcohol involves cellular misconnections and missing brain cells. Thus, brain function is reduced, and the deficiency sets up behaviour issues we call “criminal code violations.” I tell the judges people with fetal alcohol have a brain like a sandstone pyramid with skylights and that their fetal alcohol elevators stop at only even-numbered floors and never get above floor 87. Their pyramid is honeycombed, and parts are blocked off, unavailable.

By this time, I have a compliant audience.

I stress that if the judges continue to participate, they will know more about fetal alcohol than most psychiatrists, psychologists, and court-ordered experts.

I have them, all of them, put their hands together outstretched with palms up so they form a platform, a disc with their little fingers touching and thumbs on the outside of the flat disc created.

I say then this is a model of the baby’s brain, at perhaps day 15 of pregnancy, a disc about the size of a pin prick.

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This disc grows to a ball that is the brain you have today. I show them how to make a ball by curling the fingers into two fists side by side knuckles touching.

I wiggle my two thumbs and say the thumbs represent your frontal lobes.

I make this disc into a ball and wiggle my frontal lobe fingers several times and make everyone do so. I did the same when teaching the sing-song saying about tying a bowline with children. I make sure all participate. We laugh. That way, no one falls, or no one fails. The complete participation is the key. I challenge the judges if they refuse to play, the same way I encouraged youth to climb up a rock cliff: "You can do this Bob, Come on Karen, I know you can make the next move. Just try! You are safe on the rope. I have you connected to me!"

I promise the judges again, that if they do this next bit of silliness for the next two minutes they will know more about fetal alcohol than 99% of psychiatrists. Everyone seems to enjoy picking on psychiatrists. The lesson becomes a group exercise, a bit like cheering for Team Canada.

We practice brain development. Over and over again: from a disc to a ball several times. I tell them that is how their brain developed. I describe the stages from snake brain, to dog brain, to chimpanzee brain, finally to human brain. To give the judges a picture of the human brain, I persuade them to take their right hands and stick their four fingers, two in each eye socket and grab their foreheads with their thumbs and hand and hang on. I ask them to hold this position for about one minute. I explain this

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body part they are holding is the frontal lobe...the highest stage of brain development.

There is something funny about being in a room with people holding their brains and eye sockets. The humor is infectious and helps to reduce defenses. We lower our guard when we are laughing. With humor, we can take chances and be foolish in a group if everyone else is also doing silly things.

Several times I say, "From a disc to a ball, from a disc to a ball." I explain the two fists are the two hemispheres of the neocortex...left and right...I say these two fists represent the chimpanzee brain.

To represent the snake brain, I ask the judges to make a fist with their right hands and hold them up. That bump, I say, is the bump on top of the snake's spinal cord. It is the reptile brain, the brain of digestion, of elimination, of heart rate and respiration, and the basic instincts of reproduction.

To add to the bump, the bump atop the spine, I put the left hand over covering the bump like a rug.

This I say is the dog brain, the limbic brain, the emotional brain, the brain of relationships. Here, I interject the well-known truism of fetal alcohol: all successful fetal alcohol interventions are through the limbic brain, the emotional brain, the brain of relationships. Every skilled probation officer knows relationships work best. Experienced probation officers know that relationships with their clients are the key to compliance. Brute force and threats create sullen youths in jail, waiting, and angry.

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I point out that brain-wise, Rin Tin Tin and Lassie, with the dog brains, have vast improvements over the snake brain.

After the judges have made a dog brain, I have them make the two fists of the neocortex (again from a disc to a ball – repetition with heart) and again tell them that is the chimpanzee brain. This next layer of brain is a vast improvement over dogs' brains.

I wiggle my thumbs and repeat that they represent the frontal lobes.

Then when the judges are again grabbing their foreheads, I say, this is the brain of Shakespeare, the brain of the engineers who put a man on the moon, and the brain that gave you the wisdom from all the stuff your mother told you.

Part of the exercise is to look foolish, to make the activity a game, to include all.

I make sure we are all laughing as we go along.

I scan the crowd, and if someone is reluctant to play, I point him or her out and heckle that person until he or she plays along, as I need everyone to play so we have a positive group identity.

When I have the normal brain science by hands demonstration complete, I go back and start again, making the disc of the baby's 15-day-old brain.

Now we that are all playing, everyone makes a disc. Then I say: "Take your chin and rub your chin bone around the edge of this disc you have created with your fingers that represents the baby's brain."

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I spend about 2 minutes here...everyone rubs their chins on the tips of their fingers, over and over and over and over. Then I say, "That is alcohol on the periphery of the brain."

You have now killed a few brain cells in a 15-day-old brain. They are gone, gone forever, and the cells that flow from these starter cells will never appear as the brain develops to create more complex brain structures.

We then go through brain development again and we have the hands act out "from a disc to the ball." I tell the judges that alcohol kills deep core structures in the brain. Scientists like Ed Riley and Kathy Sulik can tell which parts are damaged.

I advise the judges that scientists can tell what parts of the brain are missing by the timing of when a pregnant mother drank alcohol.

I explain again that alcohol, does two things: first, it connects the brain cells to the wrong brain cells, and, more importantly, alcohol acts as a solvent, like nail polish remover, or paint remover. Alcohol bubbles away brain cells. They are gone forever.

If the audience is with me, I do what I call the "alcohol dance." I draw a circle in front of me about 5 feet around, explaining this circle is one brain cell. I explain alcohol is a slippery molecule and the alcohol slips into the cell between the parts of the cell wall. I stand on the edge of the imaginary circle and wiggle dance into the center of the imaginary circle, the single cell.

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Now I say alcohol is on both sides of the individual brain cell. With alcohol on both sides of the cell wall cell death occurs. I tell the judges that Professor Ed Riley of the University of San Diego once told me over lunch that cell death sounds like a “pop,” like the sound of a cork pulled rapidly out of a wine bottle.⁸

With enough cell death, the baby’s brain becomes incomplete, missing pieces, and brain function is impaired and cognitive ability is reduced. Thus, people with fetal alcohol have lower cognitive skills than other people. What you see as normal cognitive work for you, is not easy for them. They make mistakes, of the same mistakes, over and over again.

I repeat the process again, noting how the fetal alcohol brain has missing pieces; that is, it creates a permanent physical brain-based disability with reduced cognitive abilities. I have found repetition a helpful educational tool.

Some people find this 20 minutes of play exhausting, even though all they have done is manipulated their hand and chins. Usually, no one is smiling, and I have their complete attention. The emotional temperature is hot in the room.

Then, I tell funny stories about things my clients have done. Everyone laughs until they realize they have seen or heard similar stories in their court rooms or their law practice.

I tell them an accurate way to diagnose fetal alcohol in their courtroom. At a first appearance or bail hearing when the prosecutor reads the police report, or the set of facts that lead to the arrest, everyone in the room laughs. Everyone thinks the defendant is a first-timer. Then the crown prosecutor reads out a

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long criminal record, and the laughing stops. I ask judges to focus less on deviant behaviour and focus more on the brain before them. Ask: "What is going on in that brain? I would not do that, and neither would anyone I know".

I encourage questions at any stage. Just yell them out. After doing this activity for 15 years, I have learned that whether in Australia, or Alaska the questions are the same.

I acknowledge this activity is not a standard legal lesson, so I talk law for a moment. I refer to famous fetal alcohol cases and the foundational McNaughten Rules of Victorian England.

I like to end with positives, so I offer suggestions to make the judges' courtrooms more brain-friendly.

The point of funny stories and hand dancing is to activate different parts of the brain, to use storytelling as a way to discuss difficult legal and political issues. Fetal alcohol is political because we all have this little voice in our heads that says: "They should not get away with it." We demand our pound of flesh. Irrationally, society demands that jail be used to cure missing brain cells.

This paper is not arguing against "book learning." I am saying too much of our judicial education is a high-speed version of law school: strictly cognitive "book learning." We miss the point that people with fragmented brains are not like us: they need to be treated differently. This lesson of difference is not easy for judges, who are trained to treat all equally.

Learning can be fun. I do not humiliate the people in the class, but I do push them to an edge where they can step outside

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their narrow judicial conservative lives and, along with others for a few minutes, do a slightly foolish exercise.

Outdoor education is complementary education. High school biology and physical education are still required to be successful. I have found the hand games and acting out the alcohol/cell dance allow the judges to relax and transport themselves to a different place, a cognitively less defended place. I need the judges to be less defended because I am challenging some basic assumptions in law.

Judges have heard enough law to choke a dinosaur; they can read. They do not need or want someone to read another scholarly paper to them. I need a way to talk about brains in a few minutes and in ways that are fun. I need them to have a body memory, a new frame of reference.

My work with judges is not a replacement for scholarly papers; it is complementary. I have found you need a gentle way in to explain fetal alcohol to judges.

David Boulding June 2015

I owe Professor Emeritus Gordon Johnston of Trent University for his hours of helping a former student, and Professor Susan Brooks of Drexel University Law School for her suggestions. All the errors are mine, and the bumpy bits too.

ENDNOTES

¹My high school geography teacher Carl Herman was a former lawyer. He said I might read Postman and Weingartner's *Teaching as a Subversive Activity*. Written in 1969, the book was a welcome shock. Quickly, I read all Postman and Weingartner's

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books. I now give the book to beginning teachers. I have three extra copies, just in case I meet a young teacher.

While studying Native Studies at Trent University, I met Professor D. N. McCaskill. He said I must read Paulo Friere's *Pedagogy of the Oppressed*. While in law school, I went back to Friere and read everything he wrote. I missed meeting Friere when he came to speak at UBC. McCaskill also said I might read Carl Roger's *Freedom to Learn*. While doing my Masters' in Poetry/Rhetoric, I went back and read everything Carl Rogers wrote. My reading has informed my teaching.

²This mnemonic was developed by Dr. Julianne Conry, now retired from 35 years at University of British Columbia. She is a neurological educational psychology expert and one of the authors of the only study in the world on prevalence of fetal alcohol in jails. She now works at the Asante Centre in Maple Ridge BC, doing clinical assessments of people with fetal alcohol.

³Diane Malbin is the author of the best book on fetal alcohol: *Trying Differently Rather than Harder*. Available at: fascets.org., her book is 80 pages and costs 20 dollars, I tell people if you cannot afford the 20 dollars, then write the title on you mirror and read the words daily. The second-best book, also by Diane, is called a *Collection of Information for Professionals*. It costs 25 dollars and is a plastic-coil-bound opus of 200 hundred pages and available at the same nonprofit organization in Portland Oregon. I have had hours and hours of personal conversation with Diane, who is fond of telling this "no solution,

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no problem” story from her student days. Diane and I both agree we had great teachers.

⁴Steve Van Matre. *Acclimatizing*, 1967, published by the American Camping Association. Now out of print. It is available at Amazon used books for one dollar and \$6.49 shipping. The book is the central text of experiential education.

⁵The paper is widely available, translated in several languages, on the Internet and at my website: www.davidboulding.com for free.

⁶This is the most obscure important fact I can think of.

⁷Professor K. Sulik can be reached by email: mouse@med.unc.edu

⁸Professor Ed Riley at San Diego State University has spent his life studying the brains of people with fetal alcohol. He is a distinguished Professor of Psychology and the Director of the Center for Behavioural Teratology. Along with Professor Sulik and Professor Anne Streissguth, now retired, from Seattle, and Professor Susan Astley also from Seattle, Ed Riley is a giant in the field. Canadian research is centered in Maple Ridge BC where Doctor K. Asante has just retired and where Dr. Julianne Conry still toils away. Dr. Sterling Clarren M.D., formerly of Seattle, heads a Vancouver consortium of researchers from the western provinces. Brilliant people are also doing necessary work in Winnipeg and St John’s Newfoundland.