



## The Davis Science Center Story

*Some thoughts on  
The Beginning, Creation, Style, Purpose, Direction*

***It was in 1979 that the idea was conceived.*** *There were five of us, Anne Hance, Judy Moores, Maria Ogrydziak, Cay Pratt, and Sherry Venezia drinking our choices of coffee or tea in a comfortable living room, the pale sun streaming through the windows and dancing on the polished floor.*

*"I do believe we could make it work. I was involved in a similar thing when I was a teenager and could write to them to see if they published anything about their founding and how they actually went about starting."*

*"OK, I agree, but what sort of place are we talking about here?"*

*Thin wisps of steam, caught in the sunlight, rose from the cups and the five women watched them idly as they sorted out their thoughts about this next venture they were considering.*

*"Smallish, I think. Not big like the Exploratorium or the Lawrence Hall of Science.*

*"Right, and different from the Sacramento Junior Museum. This should involve all sciences and somehow be able to let people find out how science is part of all of our everyday lives."*

*"It needs to be sort of informal - casual - quiet - a friendly place that anyone, any age, any background will feel comfortable in."*

*We could start it in a garage. Anyone here have a garage that's empty?"*

*No one did. The conversation drifted on to other things and then we went our ways, but the seed was sown.*

We wanted people to discover that science is interesting to think about as an everyday sort of thing. We wanted people to have continuing - weekly or monthly - opportunities to do things and learn about things that are science and are basically worth knowing because the knowledge makes life richer, more meaningful. We wanted people to learn such things by finding out for themselves in practical ways because this sort of learning is more interesting and more lasting. We wanted people to discover how to know about things that would make them better guardians of their own lives and their world.

We were all busy people with full days so several months went by before we talked about this again. Now there were three of us, Anne, Judy and Maria. The other two were interested but not so involved. We had the brochure from the museum that Judy (a biologist and a teacher) had worked in as a teenager. It had some inspiring things to say and we were encouraged. We talked more about what we wanted this place to do for people. About what it had to be like if it was to have these certain effects.

Maria smiled, "What I think would be great would be if we could have several big tubs of stuff that people could investigate and experiment with. They could do it right there - in the garage. But if they want to take home what they have been working on, they'll

have to bring something to put in the tubs to replace what they take out. It wouldn't have to be the same."



It was the Fall of 1980. Maria (an architect) designed a simple, three-fold brochure prospectus and, in the local paper, we announced several daytime and evening coffees. People came to all the coffees and we listened to their ideas. Now, rationalizations and supporting arguments for the idea were born.

We all belonged to a local non-profit corporation dedicated to educational enrichment and, using this organization as a parent organization, at Anne's suggestion we formally applied to the Davis School District for the use of a room in the District's Administration Building in the center of town.

In late Fall 1981 the Davis School District said "yes" to the use of the room. Suddenly in the Winter of '81 Judy, Anne, and Maria were caught up in a whirlwind of activity.



A committee was formed. More publicity. More input.

**In April 1982 The Davis Science Center was born.** It opened its doors to 300 people, adults and children, during the Spring holidays.

Scientists from the local University campus (faculty, staff and graduate students) and local naturalists helped to create a special sort of Spring holiday, extra-curricular science program. Children from ages six to sixteen met for an hour at a time with practicing scientists and naturalists. They learned about things that were happening in the University labs and were introduced to **materials, equipment and ideas that opened their eyes to the world of science and to the lives of scientists.** Parents too were participants in several of the sessions.

"Lasers," "Colors and Crystals," "Squid Anatomy" ... kids and their parents lined up at the door. Kindergartners to tenth graders responded to the exciting science programs. The classes were free.

Later, a monthly lecture series which met sometimes at the Center and sometimes on campus provided adults and older children with different experiences and information not otherwise available to them. Dr. Tom Cahill presented "Gutenberg Meets the Cyclotron", Dr. Norm Gary let us into the secrets of "Bees," Dr. Steve Hsia opened up his lab for a presentation on "Robots".

Now reality loomed. This was a real thing we had created. This was in truth something wonderful, ambitious, challenging. The Davis Science Center was an exciting, new and different way to involve people in science. Its small size was seen as important - it was a personal place. Its informality was a trademark - we collected stuff from dumpsters and created opportunities for people to do science by investigating, experimenting, observing, but above all questioning and thinking.

**A wonderful aspect of these first years** was the interest and commitment of the people who helped to create the Center. All of them were volunteers. They came from all walks of life and each brought a different quality or skill. They brought to the adventure a spirit of excellence, the joy of sharing science and a commitment to education. Each one left an indelible mark.

An exhilarating mix of ebullient enthusiasm, creativity, previous experience in a small museum, and inexhaustible energy blew into the Science Center's life in 1982, stayed for a bit more than a year, and fixed herself firmly in all of our hearts. This was Flo Hayes who was the one who taught us about "dumpster-runs" to collect invaluable materials from which she created simple, hands-on science activities dealing with complex concepts. Flo was our Coordinator before we had a formal staff structure. She worked for free of course as everyone did.

Mark McNamee, the first President of the Board and Professor of Biochemistry, helped to more clearly define the philosophy and direction for the new center. Anne and Judy, both members of the Board, continued to influence philosophy and worked in very practical ways in the developing programs to establish their structure and style. Maria remained involved and was the driving force behind the purposeful, organized development of a detailed building prospectus which became part of the Science Center's Central Park Master Plan submitted to the City of Davis in 1985.

Meanwhile, Evelyn Buddenhagen, also a member of the Board (and its first Vice President) became an integral, creative part of program development. After Flo had moved to the Bay Area, Evelyn was the leader of a "Drop-In Committee" which designed and developed the public Sunday afternoon programs. But Evelyn gradually became the driving force behind a different style of drop-in program. She developed **the first truly innovative basic program of the Davis Science Center.**

"Oh, it's so hard to remember," Evelyn reminisced recently looking back over her years of hard work. "I did Teeth Day and Health Day, and Mosquitos." Each program in those days lasted only for one afternoon, such a lot of effort for so brief an opportunity so rich in ideas! **History and art and culture all integrated into informal, family experiences in science.**

"When I was thinking about Teeth Day, I kept asking myself questions about what can be learned about teeth. I discovered that I had learned about teeth at all sorts of different times. My knowledge was quite scattered. I thought how much fun it would be to put all the different pieces and types of information together into a program. All sorts of things had to be integrated. There was anthropology, anatomy, zoology, health, and so on.

"Things really jelled with the Tomato program in 1984. There was the art aspect, of course, that appealed to me. Then history, the history of the tomato. This meant cultural things and trade. And botany and genetics - the evolution of the modern tomato plant - chemistry, nutrition, pathology. We had tomato plants and Charles Rick helped and then graduate students from Veg Crops and Plant Pathology came and talked with visitors and showed tomato pests and diseases. Then there was the technology. Everyone tested the viscosity of tomato paste using apparatus from the UCD campus. And it was all set out simply and informally on the tables for people to investigate."

Under Evelyn's guiding hand in those early days we very soon forged bonds with many individuals and departments on the university campus. To make the exchange of ideas and resources 'legal' we established formal agreements between the University and the Science Center but the contacts that made the most difference to the development of the Center were all by personal introductions.

"Lars Anderson? He's my boss. I'm sure he'd like to do something for the science center. I'll talk to him and then you call him, OK?" Shelley, talking in 1983 about an aquatic weed scientist, introduced to the Center an energetic botanist destined to become a board member and then President of the Board for five years.

The bonds between the Davis School District and the Science Center were strong from the very beginning. The people involved in the founding of the Center were well-known throughout the District for their work in the schools and for education in general. The Trustees and Administration of the School District showed admirable insight and foresight by encouraging and supporting this grass-roots effort before the subject of science literacy /illiteracy was being so much talked about. In the end the Davis School District would provide facility space for the Center for more than seven years.

**It was a school inquiry in 1985** that led to the development of the next innovative, unique program. A rural school in Solano County called to say that they were hungry for science. What could we do for them? Evelyn's brow wrinkled and her eyes roamed around the Center. **"We'll take the Center to them since we are too small for them to come to us."**

We called it "Science In Your World" and for three years Evelyn and Anne went two or three times a month to the far reaches of Solano, Yolo, and Sacramento Counties with Anne's huge Suburban station wagon and Evelyn's tiny VW Rabbit loaded with the contents of the Center's storage cupboards. We would set up in the late afternoon in a school auditorium. Twenty or more tables would be draped with yellow, blue, red, and brown cloths and what we then called exhibits, but now call explorits™, were set out ready to be explored by the hundreds of eager hands that would crowd into the hall during the evening.



Evelyn always augmented the storage-cupboard-contents with specially chosen parts of the varied weekend Drop-in Programs and Anne gained a tremendous amount of enjoyment out of creating new explorits™ with colorful, simple backdrops and activities designed to intrigue, inform and allow thoughtful 'hands-on' investigation. Later, with a grant from the Sierra Foundation, Dana Richards, board member since 1983, an epidemiologist vitally interested in science education, spearheaded a Human Body project with the creation of handsome carrels and activities that also went on the road with the Science In Your World.

Sometimes we had people to help us set up, but usually were not joined by our helpers until about 6:00 p.m. Then we would find a quiet corner, open up the baskets miraculously produced by Evelyn, and feast on a delicious gourmet meal that she had somehow conjured up. The meal and the camaraderie of the group set the tone for a spirited evening. Our helpers would generally be faculty from the University of California Davis who delighted in this opportunity to share their knowledge and enthusiasm informally with the families who showed so much interest and appreciation during the program.

The regular involvement with **practicing scientists** as resources and as integral parts of programs, the weekend "**Discovery Days**", the associated weekday "**Discovery Lessons**", and the "**Science In Your World**" are the hallmark of this Center. Created with volunteer enthusiasm and dedication, **they are unique**.

**Anticipating the need to fund the building** which was designed for Central Park by Maria in 1984, a preliminary Capital Campaign was initiated in 1985 after a special workshop by a United Way volunteer.

The Board was in the midst of a regular meeting at 525 C Street. The sun was shining but the windows faced north so no dancing rays lightened the mood at the table. The carpet was still damp from the soaking it had received the previous weekend when the rain found easy access into the room through a hole or two in the roof, down the walls, into the cupboards of materials and equipment and onto the floor to a depth of three inches! Barefooted Board members, staff and volunteers had spent six hours soaking up the standing water, spreading things out to dry.



"We have to think of the future. I suggest that we arrange to have someone from United Way come to teach us about how to raise funds for our building." Anne looked around the table. People sat somewhat glumly smelling the damp odors emanating from the carpets.

Judy nodded, "There has been such a great response to our programs it is obvious that we are meeting a need out there. And, remember, we can't just stay in this room at 525 C Street for ever. I agree ... we have to think of the future. There's a good chance the City Council will agree to allowing us to be on Central Park."

There were differences of opinion but we did have a United Way workshop. We did initiate a small campaign of pledges. These pledges paid for much of the planning that occurred over the next five years as hopes and dreams, board and staff, policies

and procedures evolved. The City Council did approve the presence of the Davis Science Center in Central Park and after a year or so of political maneuvering by developers and a local environmental movement calling itself "Save Open Space", the Center signed a City lease for a site for its building on the Southeast corner of the City park. Now all that remained was to raise sufficient funds to design and construct the building.

The design phase came first. This was an exhilarating period. First the RFP (Request For Proposals) was sent out to dozens of architects. Then the responding architects were interviewed and their preliminary designs evaluated. This was FUN! Eventually Dean Unger was chosen and he and his colleague Larry Diminyatz worked with us to produce a series of conceptual drawings all for a 12,000 square feet building to be set on the south east corner of Central Park. This entire project and its sequel was orchestrated with finesse by Dana who, with several others, has dedicated a large portion of her life to the Davis Science Center. The major fund raising effort came a little later.

**By late summer 1986 the Center had relocated** from 525 C Street to a large classroom in a West Davis school. Two new people were now part of the staff. Phelan Fretz and his wife Laura had come to study at the University. One of the things they did on their first day in Davis was to drop by the science center to see how they could be involved. Phelan had worked for several years at the Philadelphia Academy for Natural Sciences and Laura had worked at the Boston Children's Museum. They brought new professionalisms, new programs and new understandings. Phelan's energy, experience, and commitment brought the Davis Science Center to a higher stage of development. He instituted a program of assemblies similar in style to the ones he had run in Philadelphia. They helped increase the center's audience in numbers and in geographical range by more than fifty percent.

Almost everyone had volunteered their time for the first few years. The computer programming teachers had been paid and some of the vacation class teachers were too. Now, Phelan and Laura were paid for the assembly programs they designed and ran, but the business of managing the daily running of the center remained largely a voluntary joy for about eight years.

In 1985, a phased program which instituted gradual payment of salaries for management staff over a five-year period was adopted. Because they were now to be paid for one or two of the forty hours they worked each week, Anne and Evelyn sadly stepped down in 1986 from the Board. They felt that there was an intrinsic conflict in being Board members as well as paid staff. Anne became the Executive Director responsible for the overall management of the daily operations of the Center. Evelyn became the Program Director, responsible for all purpose-related programs. By 1991, as the phased program was completed, the Center had come close to paying appropriate salaries and wages.

**The make-up of the Board of Directors gradually changed.** This was an inevitable metamorphosis from an original, small governing committee, to a six member initial corporate board, to a twelve member board of involved, participatory members. The board continued its evolution in 1986 by developing more diversity which was representative of the increasing numbers of clients and the expanded geographical range of the Center's programs. Business people and community leaders who did not necessarily have science backgrounds were invited to join the board.

"I'd like to nominate Tom Frankel to the Board; he's an attorney. I don't know that he has any science background but I think this project will interest him and he'd be a real asset. He's well known in Davis. He's been on non-profit boards before."

Tom joined the Board in April 1986, became Vice President in 1987 and then was President for two years. Under his leadership the programs flourished and grew and the Board expanded from a maximum of sixteen to a maximum of thirty-two members and became a more representative group with an expected annual financial commitment.

This change in the character of the Board became more aggressive under the guidance of a fund-raising consultant who encouraged us to create a board of directors representing the Center's geographical service region in addition to the original representation of the general Davis community, scientists, educators and business people.

### **The Davis Science Center was growing up!**

In 1987 Anne and Evelyn decided that the time had come to start networking with people who had experience in developing and designing science centers. They visited with senior designer Linda Kulik of the California Academy of Sciences, and then with design staff at the Oakland Museum. These were revealing visits and we learned a great deal about the philosophies, policies and procedures of these places. Evelyn continued to expand the network of communication with other museums and centers and with museum-world and education associations.

Meanwhile, Anne started phoning around the U.S. and talking to museum directors and designers: Grant Flinn of the Ontario Science Center, Joseph Wetzel of a design firm in Boston, Phil Aldrich of Vancouver, Drew Ann Wake also of Vancouver, and eventually, Tomas Ancona of San Francisco. Drew Ann Wake proved to be a real kindred spirit and we would have loved to involve her in the development of our plans for a permanent place and style. But Canada was too far away. However, Drew Ann did play a significant part in our life when she introduced us to the Science Alberta Foundation and brought them to see us. This resulted in our being chosen as a model for a style of community science center planned for development throughout the province of Alberta.



Tom Ancona also played a significant part in our future which started when Anne invited him to speak at the February 1990 Annual General Meeting.

By now there had appeared on the scene a focus of enterprising energy and commitment that we hadn't experienced since the days at 525 C Street when Flo was with us. Cherie Porter, outspoken, fearless, and deeply interested in providing worthwhile learning experiences for children, became a member of the Board in mid 1987. She committed herself to the Center's future by throwing her energies wholeheartedly into helping the DSC to move ahead. She took on a heavy load of responsibility by working tirelessly at "fund raising through friend raising" in company with Judy and under the guidance of consultant Terry Fries.

### **Now the outlook of the Board and the direction of the institution began to change.**

A leap forward happened as Lars, stepping back into a leadership position in February 1990, became president for a fourth term. Within a month of taking office he was responsible, with Cherie's help, for hiring museum designer Ancona.

Ancona, working with Cherie and a small committee of board and staff, produced a visionary conceptual plan for the exhibitry for the planned building. This design was executed, both as a visually exciting brochure and as a professional scale model. These clearly advanced the vision of this science center well beyond the original dreams.

Cherie was in large part responsible for the change in outlook that had the Center positioning itself not just as a science center serving a wide region with its own rather unusual brand of informal science programs, but as a prominent, regional center of a stature that the founders had not envisioned. Originally intended for the Dean Unger-designed building on Central Park, the exhibit plan became the blueprint for the exhibitry for a fine new Unger-designed building to occupy three acres of land received as a gift from a regional development group.

As the Center's direction began to change it became important for the Board to take the time to look at and assess the changes. So in November 1990, we organized a second Board retreat. (The first had been held in 1987 in the Frankel cabin in South Lake Tahoe. It had been a good, team-building, two-day affair.)

The setting was very pleasant. Randy Sater, Vice President, had arranged for us to use space in the Teichert building overlooking the American River. The day was bright and dry. Standing on the balcony enjoying the light breeze during one of the breaks the conversations continued.

"Well, I do think our strength is in our informal, personal style. I mean that we involve people in a more personal way by being informal." Tom leaned back against the railings.

"Our style is critical. The thing is, the way in which we are different *matters*. The Exploratorium and places like that are wonderful but the style we've developed - I hate to sound corny but - well, it's 'user-friendly' don't you think? "

"Well, you know, I don't have a science background and I never dreamed I'd have anything to do with anything like this, but I think this science center is very special. I hear the teachers who bring their classes say how great it is, and I hear the kids talking about how they are going to try some of the stuff they've done at the Center when they get home".

"And the families who come at the weekends. Just watching the parents becoming interested and then intrigued and then involved -- when they thought they'd just come so their kids could learn something - it's great!"

**It was almost exactly a year later that the first staff retreat was held.** It was an all-day affair at Dana's lovely farmhouse home surrounded by fields and trees just outside Davis. Comforted by the pleasant setting and encouraged by supportive camaraderie, all fourteen members of the staff attended the retreat.

This was a thoughtful and thought provoking day. The staff dealt with such questions as, What is the Davis Science Center and what should it be? What is the Explorit™ philosophy of the Center? Why Explorit™ and not Exhibit?

"It's quite hard to be a new staff person at this place. There's nothing most people will have ever done that really prepares them to work here. If you've been a teacher, you have to re-think how you interact with kids. We don't really teach. If you've worked in another science center or a museum, your ideas are all wrong because this place does things differently from anywhere! And if you haven't been a teacher or worked in another science center or museum, you haven't a chance of understanding what this place is about until you've been here at least a year!"

"Yes. When I first came here, I thought I understood the philosophy and it really appealed to me. Well, I did sort of understand, but it's harder to do and much more complex than I dreamed it would be. I'm only now getting the hang of it. There is a lot of research and intellectual planning that has to go into each program. But you know, it's worth it. I believe that what we do is really worthwhile."

"I love what I do. I really do. If I can, I'll be the person that Anne has been waiting for who says their career goal is to work for the Davis Science Center. I think what we do here is really special!"

The atmosphere was supportive and the voices around the table were full of energy. While working for the Davis Science Center was hard work and the crowded working conditions often made things difficult, everyone felt that the purposes we were working to achieve were worthwhile.

The last part of the staff retreat was spent thinking about the new word *explorit*™ and how it illustrates the particular style that the DSC has adopted. A big roll of butcher

paper mounted on a wooden frame so that it would unroll smoothly, was placed at one end of Dana's huge dining table. A streamer of paper was then unrolled from one end of the table to the other and, armed with crayons of many colors, the staff vented their intellectual creativity in devising apt phrases to describe how the word Explorit™ exemplifies the Davis Science Center philosophy and style.

"PLEASE DO TOUCH!! and don't just touch, Explorit™. Get in there and mess with it!"

"Explorit™ - just do it! Don't just look. Find your own answer! Compare your answer with others."

"Explorits™ are the way to science. How else do we really learn but by doing, by taking the time on our own to discover something? Exhibits are for museums!"

### **The Davis Science Center has become the Davis Regional Science Center.**

Programs reach fifty thousand people a year and extend into a twenty-county region. The Center has established an informal style that is unique among science centers. The Center's purposes are still as defined by the founders but the traveling outreach to underserved communities exceeds the founders' expectations.

Our fourteen energetic, professional staff members are now paid. Dedicated volunteers are still involved in all aspects of our functioning. The Board has grown from six to twenty-seven trustees, all of whom contribute \$1000 in personal funds each year.

The Center has an international reputation as a result of its association with a Canadian designer; and its informal style of programming was chosen as a model for small, community science centers being developed in Alberta, Canada.

The Science Alliance has been launched by the Center's Board as a regional force to improve funding for informal science in Northern California.

The Center will be ten years old in April 1992!

What will the next ten years bring?

*Anne Hance, December, 1991*

*With my apologies to the many people who made important contributions during these first ten years but whose names are not mentioned.*

***Your mark is on our progress and your names are not forgotten.***

### Author's Comment

This story - because it is a short story - omits specific mention of some very significant things including: the considerable amount of community support for the center; the encouragement and support given by the school-board members, city council members and city staff; visits by world famous scientists (Richard Leakey, Jean Michel Cousteau, Francis Crick); honors and awards; business and corporate support; gifts from community members - the list goes on and on.

### Update

In March 1992, after several years of discussion, the Davis Science Center Board chose a new fictitious business name - EXPLORIT! - which is the name given to the center's hands-on activities. Then, in June - another new home! With a five year lease from the City, and an option for five more, the Mace ranch house became EXPLORIT's! fourth home. It took \$100,000 from the State and more than that amount in donated services and materials to remodel and bring the building up to code but it was the beginning of a new era. In honor of this, Anne Hance announced her intention of retiring in June 1993 to make way for new staff leadership with

special expertise in fund raising and finances.