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#### Author's perspective on the book and its goals

This is a book that tries to depict the multiple strengths that a mind brings to bear in the area of intellectual activity that we have come to call organizing. *Growing Smarter* starts out as a book about children. The book takes on the challenge of discussing their nature, their experiences, and the things we can discover about what makes them tick as organizers. The purpose is to establish a collective consciousness about this application and to stimulate each of us to more effectively use this application to nurture the mind of the young child. Although I start this quest with children, I do this in the belief that most of the ideas advanced here are applicable to people of all ages and can be used to help anyone develop better organizing skills.

Somehow we manage to develop a “mental map” of the space we work or play in and this leads us to being “organized.” The progression is predictable. It begins with the direct physical experience of encountering objects in our environment. This is followed instantly by the discovery of underlying properties of these things, how they behave, and how they interact. Whether it’s a child playing with blocks, an emerging adolescent engaged in Pokémon, or a logistics executive sorting out supply chains, similar principles apply. I thought about the use of the word “organizing.” Obviously, we organize in every aspect of what we do. So the word has use but, in effect, conveys no specific meaning, no knowledge. We use it as a broad label to get a sense of closure on a set of complex tasks we perform in many different walks of life. I became frustrated with the limitations of using this word to describe such diverse behavior.

As I pondered the fact that the level of complexity of the environment in which we “organize” naturally increases as we get older, I found myself going over this label and seeing it as a barrier to our developing a better understanding of mind, especially children’s minds. Simply labeling complex things and then passing over them is the way many humans deal with hard or difficult-to-explain phenomenon. “Organizing” has fallen prey to this self-defeating strategy for coping. This motivated me to dig deeper into this “domain” and to share a more analytical point of view about the processes of organizing, all in the hope of shedding new light on the subject. This book is my first effort to articulate some of my findings.

It is my hope that by this effort, I can further stimulate and encourage others to use the application of organizing as the basis for studying child development in new ways. I hope this effort results in a common understanding of the stages of “organizational development”. If we can show how identifiable types of organizational skills depict differences in brain development, this might lead to new ways to stimulate and teach children how to learn.

It is my hope that through this book I can encourage further exploration of organizing as an instructable discipline, one that is not necessarily curriculum based. The goal is to make this discipline “self taught”, where new “self-discovery” tools are used by each child. I also hope that by allowing each child to find the “mind machinery” that permits the assimilation and enculturation of information about our world in the process we label broadly as “organizing”, we can set more children confidently on their way, earlier in their life.

A further goal of this book is to make us all better at mentoring in the application of organizing. Knowing more about the process of organizing can help us become better at observing young children as they mature. As we become more skillful mentors, we will be better able to help children become self-improvers in organizing. This just might result, by “osmosis,” in their becoming self-improvers in learning how to learn.

Another purpose of this book is to provide a perspective on product innovation in this important application. The tools we have developed are woven by example into the book in the interest of offering insight into how innovative tools can be developed and how they can be used to change behavior. I hope our dedication to tool building in this area is received in the spirit it is intended and that it will lead to further innovation in traditional stationery products. I trust this will result in a more well defined role for tools such as this and an even stronger footing for these kinds of products in an ever changing high tech electronic world

#### How to read this book

This book is organized into two parts.

Book 1 is a practical guide to organizing children at school. This book leads us from the day of “the dilemma”, the moment that the student is found to be disorganized, through a solution that comprehends the reasons why disorganization occurs in the first place. This book features practical tools that enable the child to get themselves organized. It explains what the tools are and shows how these tools are being used in real, nuts and bolts, school examples. Lessons learned are highlighted in the interest of showing others a more effective way to proceed on the path to developing better organizing skills in children.

Book 2 explains why the tools presented in Book 1 work. Using the tool kit of Book 1 as a prototype tool with which we can think and talk about organizing, Book 2 takes on the challenge of explaining the various dimensions of the individual strength we call organizing intelligence. In our effort to describe, dismantle, and analyze this talent or skill, Book 2 delivers it’s message by taking us down the path of “thinking about how we think about organizing” and is designed to get us on a track going in the same direction, in the effort to study this special and unique kind of individual capability.

Appendices A & B provide more details about the tools that support the intelligence model presented in Book 2. The Workcenter Organizer is explained in further detail and additional product options are discussed.

By delivering the book in two parts, it reasonable to read the book in two stages.

In the first reading, the interested party can work through Book 1 and assess whether the barriers to getting our kids organized are surmountable and whether the valuable tools, now available, can really stimulate effective organizing behavior. The reader is provided with the grounding needed to explore the tools and make a decision about whether the tools do what they are intended to.

In the next stage, the reader can dig into Book 2 and hone their own understanding of the process and intelligence of organizing. In this stage, the reader can use Book 2 as a guide to

understanding the underlying forces at work and develop their own theories of the intelligence associated with organizing.

Appendices A & B are intended for the reader that wants to go into further detail with the specific organizing products.

## Overview & book synopsis

### Book 1-Growing Smarter

#### Part 1—The Organizing Dilemma

Are children really organized? Is their first perception that they are organized changed at an early age by the inevitable confrontation with their elementary school teacher's adult world rules?

In this first part, we look at the setting in which organizational skills are first developed in preschool and elementary school children. The observation begins by presenting a conversation with Alex, an organized 4 1/2 year old. Contrasting this conversation with a fantasy story that discloses some of the risks, fears, and feelings of insecurity these children develop, the apparent nature of the "organizing dilemma" is exposed. Taking a short trip in a time machine, moving from preschool into 6th grade elementary school, allows us to take a look at the nature of the dilemma perceived by each child as they make their way into the adult world. The organizing task faced by these children is contrasted with the deluge of a hundred year storm in the interest of raising the emotional stakes and questioning whether the child is really prepared for the challenges they will face. This comparison allows us to recast the "organizing dilemma" in it's true light.

#### Part 2- What To Do

Like anything worth doing, the doing is the fun part. Yet, like anything worth doing, the doing is the hard part. The "doing" part here involves more than merely addressing the apparent dilemma. The hard part is providing a solution to the underlying dilemma. Getting children to become self-organizing requires the development of a tool to assist the child to solve the problem for themselves. The proposed solution, Workcenter Organizer, is introduced in three steps.

In the first step, the use of a tool kit as a "transitional system" is presented. Often, the first tool used to teach problem solving in any difficult application is some form of a "trainer". The use of "teaching assistants" is explored. The need they fill is explained and the novel, unique form most tools take is pointed out. This prepares us for the next two steps.

In the second step, a frame of reference is established for the elementary school document handling application. The application is explained in detail using the 6 C's, so that everyone has a common understanding of the problem solving environment. The application is characterized by identifying the relevant objects that are handled, their properties, and the requirements for handling them correctly. Work flow in the typical classroom is explained in terms of the general behavior of "one skilled in the art". This behavior is the problem solving skill that is needed.

In the third step, the tool kit is presented. Based on the 6 C's characterization of document handling, the design goals for a tool kit that encourages and supports these desired skills are reviewed. Then the tool kit is presented as a solution to both dilemmas. We show how the Workcenter Organizer is structured and how this structure supports the methods that the child will need to use in order to get organized and stay organized. The features of the tool kit are mapped into the application so that the benefits of the tool kit can be clearly shown.

#### Part 3—Real School

In this section, we turn our attention to real applications of the Workcenter Organizer.

The specific experience at Fay School, Southboro Ma. is discussed by providing a case study of what Fay School has done. An example of how the workcenter is used in a typical subject, Science, is then covered, showing how different parts of the system come into play. Excerpts from the headmaster at Fay School, from teachers, from parents, and from students using the system provide additional insight into the true benefits and value of the workcenter tool kit for document organizing.

#### Part 4—Operational Considerations

The goal of this part is to review implementation issues. It is my hope that by doing this, I can provide a more complete picture that goes the extra mile in transferring important skills and insights about this technology. If you decide to use this approach, points presented in this section will enable you to get an early success.

First, practical day to day considerations in beginning a program that employs the new Workcenter Organizer tools for document organizing in the classroom are covered. Here, we discuss existing methods and how to integrate the work center approach into the class room.

With what we now know, we are on the way to getting started. At this point, the role of the mentor, teacher, and student is discussed and how they play into the process of employing the system. Mentoring styles and mentoring goals are looked at through two whimsical stories in what we might call a “mentor rich” environment. Imprinting is shown to be a very powerful and effective way in which Workcenter Organizer fulfills its prophecy. With imprinting, it is explained how simple peer level interaction is the way mentoring occurs.

### Book 2-The Intelligence of Being Organized

#### Part 1—Organizing Intelligence

Since we can't just ask ourselves how our minds work to get us organized, we will have to try a different approach. I start with a simple working definition of intelligence. The issue of defining organizing intelligence is posed and discussion about ways to develop and to measure this kind of intelligence are presented.

#### Part 2-Uncovering the Properties of Organizing Intelligence

To uncover the properties of organizing intelligence, I present some new ideas and employ some thinking tools to look into this aspect of mind function. The process of inventing new tools, using them, learning our way out of them, and analyzing them is discussed with an eye toward understanding ourselves better. We then look at some of the components of intelligent behavior that occur when we are “organizing”. Building on the discovery of these components of mind function, the “mind machinery” underlying the use of these kinds of “intelligence components” is discussed. This allows us to draw some conclusions about “organizing intelligence” and intelligence in general.

#### Part 3—It's Intelligent to be Organized

Without question, it's smart to be organized. In this part, some of the broader considerations involved with developing better organizing skills are discussed. The future is truly bright when it comes to the idea that more people are going to get smarter more quickly than ever before. The hope is that by raising some additional questions, the methods and practices we employ in the process of smartening up will be more evenly balanced and carefully planned. The question of whether or not we can make the great achievements ahead, together, on a level playing field for all is raised.

#### Part 4- Where Do We Go From Here?

In this part, questions about how to best integrate these ideas into our practices of teaching are discussed. This part closes with the author's thoughts about the mission and its

goals

Background on how this book came to be

When I started my business, Productive Environments, Inc.(PEI) I had the wonderful opportunity of having two young children that were interested in what I was doing. Things really got started in the “back-to-school” category when my younger son, Zack, about eight-years-old at the time, looked over my shoulder one day while I was making a prototype of a “learning tool” for calendar organizers. He simply said, “Dad, can’t you make something like that for me so that I can get better organized at school?” I stopped in my tracks and the anecdote about the shoemaker whose children had no shoes entered my mind. Without hesitation I said, “Of course I can. You and I can.”

The events that occurred from this point forward led me to realize that there was a larger purpose at hand. I realized that many of Zack’s peers were struggling with the same challenge, to be on top of what looked more and more like an adult world of “stuff.” These kids were all trying to “get organized,” many not feeling too sure of themselves. Many more felt like they were not very good at it!

Through the thick of it, my son, Adam, four years Zack’s elder, was quick to see how the things I was doing with Zack could fit into his realm. Where Zack was directed to the use of binders, Adam was free to pick and choose and was oriented toward spiral, wire bound books. His insights, combined with the forceful position of his Fay School history teacher, Mr. Upjohn, resulted in the development of a set of tools based solely on wire bindings.

My interest in children’s early development and the desire to serve them resulted in my directing an increasing portion of my effort from “adult organizing tools” to “children and adult organizing tools.” I recognized that once a working tool was in Zack’s hands, his attitude toward learning, his performance, and his self-esteem all improved markedly.

I knew from my own early childhood experience the power of a mentor and how my life was dramatically affected by a series of influential relationships. These experiences allowed me to believe in myself. I thought, by developing a set of tools that kids really found useful, tools that were also usable by adults, these kinds of tools could catalyze a positive start in mentor relationships for organizing in the same way that these relationships exist in sports and in other disciplines such as art and music.

The vision was simply to develop a tool, like a bat and ball is to baseball, that could lead to organizing being turned into a purposeful and fun exploration. And as with sports, the idea was to provide a tool that could be used alone, in groups, as well as between a teacher and a child. The purpose of engaging in the activity, whether individually, or together as part of a group, would be to improve performance at schoolwork. The bottom line objective was to provide tools that taught valuable lessons in organizing, lessons that could be carried forward in life. The point was not necessarily to provide a tool that had to be used “forever.” In the end, I felt that if the tool stuck around, then I surely would have made a contribution of substantially greater value to the participants and to the economy.

From that point forward, I directed my effort at developing the Workcenter Organizer tool kit. It was clear that in order to enable as many children and adults to experience self-esteem-building experiences around organizing, we would have to become mass market oriented. This added new challenges to our mission. Our effort to confront this obstacle was embraced by Roaring Spring Blank Book Company of Roaring Spring, Pennsylvania. With their steadfast dedication to manufacturing and to using their mass market position to carry our products forward, we are in the position to deliver the goods today.

Later on, I was given the opportunity by Dale Mercer and Steve Jacober of SHOPA to speak to the principals of the inner city schools of Chicago, participants in SHOPA's SFEE Kid's n Need program. It wasn't until then that I realized the challenge was more than just having a "mass market" solution.

This event marked the opening of the first "Kids 'n Need" resource center, dedicated to providing basic stationery products to underprivileged children around the country. I had the chance to bring Zack with me to Chicago for the occasion, and after the initial meeting, we took a bus tour of inner city schools receiving product donations we had announced the evening before. Seeing Zack's eyes open wide, commenting on how lucky he was to have been given opportunities and the tools with which to learn, put a much larger mission in front of me.

Feedback from these schools on use of the Workcenter Organizers confirmed that I was on the right track. This feedback also helped me realize that we would need to do a lot more to bring down the cost of the products we were developing so that they could be accessible to every child, no matter what their socio-economic position. It also made me realize that we would need to do more to encourage funding of projects that would lead to the use of these new tools by more young children in similar situations.

The tools we have developed and this book are a direct result of the support and encouragement of my two sons, Adam and Zack, who were so much a part of my early thinking about what to do. My children kept me motivated, brought their peers into the dialogue, and showed me what was needed at progressive stages. This personal experience has been invaluable in my effort to codify and share the explanations and ideas that follow.

This book could not have been written if it were not for the Fay School in Southboro, Massachusetts, a place that has willingly acted as an incubator for our new product ideas. The people there have allowed me to explore these ideas through products, school term after school term, with children of all ages from all over the world.

Most important of all, the continuation of my effort on every level was enabled by my wife, Sharon. Sharon brought a perspective on children from her training in early childhood development at Cornell, as well as a perspective on the business of staying in business, learned by experience from her own early childhood. Her belief in me and her dedication to quality in everything we did, allowed for the full bloom of our earnest plantings.

Three specific experiences led to the actual writing of the book itself. The first is my collaboration with Jim McDaniel, Head of Upper School and assistant Headmaster of Fay School. Jim and I had a casual meeting and discussion of what I described as "thinking about thinking about organizing" and what Jim called "meta-cognition". This resulted in an instant bond and resulted in our "joining forces" going forward. Jim provided the glue to keep our early effort alive and was a constant source of inspiration, even when we had what appeared to be insurmountable barriers to continuing. This collaboration benefitted from the constant support and encouragement of Steve White, Head Master.

The second significant experience was when Dan Hoover of Roaring Spring Blank Book asked me if I would address his Rotary Club one morning. Clearly, this was a great chance to tell people about the book I was "writing" and to finally get started, writing down my thoughts on organizing intelligence. I thank Dan for his open-ended way of doing things and his encouragement and support of my effort at every step.

Third, the "instantiating" moment, involved my encounter with a 4-1/2-year-old preschooler named Alex. Alex allowed me to see the "dilemma" that the young organizer faces as they progress from preschool to elementary school and was the inspiration that led me to get the book done. The "dilemma" is characterized in Part I of the book, and the experience with Alex is featured in Chapter 1. I thank Alex for being the self-styled inquisitor that he is.

## Acknowledgments

I have mentioned some people already, the ones that know what role they have played in the effort to get this book written. I especially want to thank Sharon for her painstaking efforts to make me make sense of book draft after book draft. I want to thank Jim McDaniel of Fay School for reading and commenting on an early draft as well as for his contribution to the chapter on “what people are saying”. Special thanks to Dan Hoover and to his company Roaring Spring Blank Book of Roaring Spring Pa. for printing and distributing this version of our forthcoming book and for providing the photos of many of the products which are featured in the sections on “tools of the trade.” Thanks go to Mark Garach of Roaring Spring Blank Book for his effort to establish the products referenced in this book as standard mass market consumables. Additional thanks go to Mark Garach and to Sally Masu of Color Scan for their work on the cover design. I want to thank Greg Masters of Discount Merchandisers for his responsive and constructive editing work.

I would also like to thank a group of key influencers that may not know how important they were in contributing to my being able to write this book. I would like to thank Chris Mabley who mentored my son Adam while at St. Marks School and who was instrumental in helping Adam to pick up the Workcenter Organizer and use it day-to-day for his own schoolwork. I would like to thank the original Fay School 6th grade team , including Joanna Wishart, Assistant Head of the Lower School, Cathy Guerra, Drew Carlson, David Radcliffe, Jennifer Hanson, and Hilary Carlson. I would like to thank the first 6th grade Fay School class that dedicated themselves to using the early Workcenter Organizers and overcame many hurdles as we worked to reach the quality levels needed for daily use. Both groups were so helpful in our development of the first video on WorkCenter tool kits. I thank Anne Bishop for teaching Zack in third grade and brightening his future. I also want to thank her for numerous conversations about children and how they do things in the classroom. I would also like to thank the teaching team at Hillside School including Brendon McGown, Head of School, Jay Thornton, and Rich Meyer for their parallel efforts in using the Workcenter Organizers and their support of our second video.

I would like to thank industry partners who were especially helpful in the early going when only small parts of the WorkCenter tool kits were available. These people include Doug Willies of At A Glance, Alex Hofstetter of Beautone, David Blumenthal and Jim Roche of Clix, Bob and Steve Cornell of Cornell Concepts, Jack Madden of 3M Company, Lou D’Amaro, Bob Perkins, Coleen Page and David Krysh of Esselte, Bill Brosnahan and Bob Boychuck of the Colad Group, and Bob Thompson and Chris Schweitzer of Specialty LooseLeaf. Bob and Chris were instrumental in achieving the quality levels needed in the initial WorkCenter kits so that we could demonstrate their complete effectiveness. It was a result of their sponsorship that I was able to deliver our first Workcenter Organizer seminars. That effort helped me formulate many of the ideas presented here.

I would like to thank Dr. Bob Brooks for a number of inspiring lecture sessions on children and self-esteem, for his support and encouragement of our early efforts in an attempt to get government grant money to install our tools with young children , and for his efforts at Hillside School. I thank Tom Segale of Segale Productions for his superlative effort in producing both of our videotapes and his interest and enthusiasm for our project. The videotape scripts worked like focus group feedback to highlight important features of our products that we needed to emphasize and develop further.

There are influencers who have played a big part in my thinking about this application. I would like to thank Seymour Papert of MIT author of Mind Storms, a book of particular significance to me in my early tool building efforts. It was the picture Papert painted of children

using LOGO that enabled me to understand the significance of the tool kit we were developing for organizing documents. I would like to thank Marvin Minski of MIT whose book *Society of Mind* played an equally important role in helping me to formulate my ideas on the differing roles the mind might play in the organizing process. During a chance dinner engagement, Marvin listened to my vision and along with Edward Fredkin, an early business mentor, gave me needed encouragement to proceed with my venture to develop the tools for the mass market.

I would also like to thank Alan Kay for his encouragement and support during a lunch at one of the fabled Boston MacWorlds when he was chief scientist at Apple. I demonstrated one of our early Windowpage® inserts to him. Even though he had never seen or used one before, he manipulated it like an expert user. I knew at that point the “movement” of this component piece of our tool kit had intuitive value. Reading about Alan’s efforts with his virtual fish bowl tool for kids and his “paper roll” cities, among other projects, provided additional encouragement to me to stay focused on tool building.

Dearest thanks go to Doug Ross, founder of Softech, where I landed my first industry job. Doug was a legendary teacher and developer of SADT. He showed me that even the most brilliant thinkers and organizers drink cold, day-old coffee when deeply engrossed in their work, with no time to do anything but pursue an idea to completion. He rewarded intellectual curiosity and was my prototypical example that big ideas could be reduced into practical tools that others could use.

I would like to thank Larry Beller of Amsco School Publications for his unconditional belief in me and his willingness to support my work with his company’s resources.

I would like to thank a few of my personal heroes. As a result of their influence, I was able to develop a positive sense of self as a valued player that could make a worthy contribution. First I want to thank my cousin, Airforce Captain Charlie Steinhardt Sr. , who introduced me to the art of fencing as a means of self-defense when I was four years old, an experience that gave me personal strength. Special thanks go to Ms. Danto, my third grade teacher, who noticed I was particularly good at making Santa Clauses and had me demonstrate my skills to the other third grade classes. In Junior High, there was Mr. Trincowski, the shop teacher. He was gifted in his projection of the belief that every child, whether they had picked up a tool before or not, could make a wooden lamp to take home. He instilled such a positive sense of accomplishment in each child as they completed the simplest of tasks toward the final goal. Then there was Mr. Walker, my gym teacher at Sheepshead Bay High School, who noticed me in a crowd of vastly superior athletes and awarded me for my combined skills of athletics and scholarship, distinguishing me among all of my peers. I also want to thank Jorge Rodriguez, my first boss when I was a computer scientist at Softech, whose humanistic approach and defense of my strategy for deliverables under tremendous pressures to “produce the goods on the critical path” enabled me to survive my first project and return to my office a hero. This was a welcome example of not only mentoring but stewardship. I would like to thank one of my earliest professional acquaintances, Dan Thornhill, for his willingness to listen to my wacky ideas about mind and make me feel sane every step of the way. I also want to thank Wayne Winkleman a manager in my later work while at Texas Instruments, whose business role as group leader, provided me with the needed running room to make a business out of marketing Artificial Intelligence computers. This success allowed me to exercise leadership skills in a corporate environment, skills which were invaluable in starting my own business.

## Book 1-Growing Smarter

### Part 1 —The Organizing Dilemma

- “Oh Yeah, I’m Organized”

My conversation with Alex, a 4 -1/ 2 year-old preschooler

I can’t think of any experience that has contributed more to my desire to complete this book and share it’s ideas, than the recent conversation I had with Alex, a precocious 4-1/2-year-old preschooler. It was early evening and my wife Sharon and I were settling into discussion, updating one another on our day’s events.

No sooner had we begun than a neighbor’s young child appeared in my peripheral view. Alex was not a stranger, having introduced himself earlier in the week. With his outgoing, charismatic personality he was a compelling presence, even though he had not yet spoken.

I quickly acknowledged his presence with a fond hello. He inquired what we were doing and started his gambit to get to know us better. Sharon asked him what school he was in. His lips moved but nothing came out. He wanted us to read his lips. That’s Alex.

I stared at his mouth as he exaggerated the words with round movements of his jaw and lips. Fortunately, Sharon was quick to read it on the first go: preschool. I was relieved. I was preconditioned by Alex’s style to see him in kindergarten or first grade and might have missed the lip read entirely or at least taken longer than Alex would have expected, impeding his momentum.

His next question, in response, was a direct inquiry to me.

“David, what do you do?”

“I make products for kids.”

“What kind of products?”

“Products that help kids get organized.”

Expecting we were going to move on from here to Tarzan’s exploits, I was intrigued when he retorted, “What’s that?”

“Well, say you have something and I ask you to put it away. Then later, I ask you to find it again. If you can find it quickly, then you are organized. My company makes products to help kids do that kind of thing with their school stuff.”

“Oh,” he said. “I’m organized. I get stuff from my teacher and when I leave class, I put it into my cubby, so the next day when I come in, it’s right there and I have it.”

Nothing simpler and nothing more correct. He interpreted my question correctly and gave me a perfect example that proved he was indeed organized according to my definition.

Completely self-satisfied with his answer, we were then off onto topics of much greater interest

to him.

The bottom line here is that something happened to confirm his self-esteem as an organized kid. It happened early and it was embedded. However, the simple interaction haunted me. Later, it dawned on me that the stage was set for a possible dilemma, referred to in the field of psychology as cognitive dissonance, which would need resolution sooner or later.

Let's take a quick look at the dilemma to be sure we all see the situation in the proper light. If, for example, in baseball, after a few early hits you experience a string of strikeouts, your belief that you are a great hitter turns into the thought, "Maybe I'm not a good hitter." In other words, the sense one has of one's self, based on first experiences, is confronted by new and more recent experiences that contradict the first beliefs and raise doubt and questions about true abilities.

So in organizing, if a successful cubby experience is later followed by a succession of misplacements, the risk is that the self-image becomes, "Maybe I'm not a good organizer." Or worse yet, "Maybe I'm not a good learner."

How might this kind of negative spiral begin? In the next section, I present a fantasy story of some children being shown the game of three shells and a pea for the first time. The purpose is to uncover some of the underlying feelings that can occur in a child when something goes lost and to see what sort of emotional incubator might be susceptible to negative dissonance in organizing and learning.

- Is It Magic or Am I Dumb?

Three shells and a pea

How can we better characterize the negative feelings of cognitive dissonance kids can experience early on in their lives? We have all heard the story of the young athlete that experienced wins against easy opponents a few times, then finally met his or her match. After a few big losses, the self-confident sport, the child that once couldn't lose, had become the child that no longer "knew how to win".

How can I tie these feelings directly to experiences in organizing? I have a fantasy story that will help us better understand some of the child's underlying feelings when it comes to losing things, the action most often associated with being "disorganized". This story is useful in presenting the "dilemma of being disorganized" that each child invariably faces as they grow up.

Join me for a brief trip to a carnival where the sideshow barker hails us and steers us over to a magician who is entertaining a group of kids with the shell game. The magician is kneeling on one side of a wooden board laid out on the ground. The kids are on the other side. There are three oversized half walnut shells in the center of the board. The magician's hand is waving through the air in a sweeping and grandiose movement, lifting each shell in turn. First shell, nothing below. Second shell, nothing below. Third shell, lo and behold, a round pea, motionless for the moment.

Down goes the shell covering the third pea. In a fanciful voice, luring one of the less shy children to lean forward and participate, the magician playfully asks the child to tell him which shell the pea is under. The child, confidently advances that the pea is under the third shell. To everyone's relief, yep, there is the pea. Then without any warning, the magician's hands go into a swift but determined sequence of motion, quickly and deftly manipulating the shells, lifting one, swiping the pea across the table and under another, sliding one past the other, and one around another, all with increasing pace.

Without warning, the question is again posed to the entranced child, "Where's the pea?"

Taken by surprise, not ever having seen the shell game before, the response is advanced, "It's under shell one." Again, the guess is correct, but this time to the apparent amazement of

some in the audience. Maybe they were talking to each other when the movement began, maybe daydreaming, but certainly a sense that their lack of attention was the cause of their surprise and their guessing wrong. They had no reason to think they'd miss again, but lucky for them, they were comfortably hidden as audience observers.

Something was clicking inside the head of the child on the hot seat, and the appearance of the pea now contributed to a swelling confidence. With a sense of the game afoot, the attention of the entire group was more intently directed to the shells, as the crowd moved in and bunched around the "foil." As quickly as the magician stopped, he started again, his hands moving in an even more frenzied pitch. "Which one now?"

"Shell two. Oops, nope." Up comes shell one and there's the pea. One more try, and the magician has succeeded in confounding the entire audience.

"Is it magic or am I dumb" has got to be the question going through a few of the kids' minds, sitting stunned and chattering about what must have gone wrong. But without hesitation they think, "Got to be a trick. Got to be magic. It's not me."

Our minds are quick to rationalize, because any other explanation would be intimidating and lessen our sense of our own competence. In short order, this would lead us into counterproductive thinking about how good we were at employing strategy, learning, and thinking. So we dismiss an error as pure trickery or magic and move on.

Can this "habit of losing things" carry into other applications, like document handling in the classroom? Is there a dilemma in the making? Is the dilemma as simple as not being organized, or does it run deeper? Let's get into a time machine and rejoin our young protagonists as matriculating sixth graders, about to make the leap into a changing world.

#### • Musical Classrooms

The 11-year-old as mobile executive

Getting to sixth grade has taken us through a progression of increasing levels of personal development. In the rosy picture, learning has occurred in a friendly environment where each child has had the tools they needed to grow. And each child has incrementally widened his or her bandwidth in order to match the rate of delivery of the goods, schoolwork, and the knowledge it was designed to convey.

If kindergarten was a playground of activity centers, where work stayed in the classroom and the child moved from center to center, we can pretty much assume that, as in the case of Alex, the centers were structured to support the objects they held. Additionally, they were structured to support the process of knowledge acquisition each child, as visitor, encountered, including a robust structure for holding tools and materials such as crayons and scissors, glue, paperboard and the like. And, no doubt, there were familiar locations for in-class archiving: sacred file racks acting like a shrine, providing a place for keeping products produced by each child at the activity centers, including the paste-in journals and folders filled with their individual creations.

Each child was quick to learn the rules of engagement at each center. The experience was not only repeatable, it was procedurally clear, logical and socially structured to enable positive traction. Hurray! And if luck prevailed, the scrapbook journals filled with unique content and the portfolio of creations were promptly displayed for viewing by peers, parents and teachers. For the lucky ones, posting included a board at home where the best work would be displayed, be it on the refrigerator, a room door, or a wall in daddy or mommy's office. And, if fortune prevailed, this structured form of nurtured learning, characterized by safely controlled interactions, continued in each contained classroom until today.

So what could possibly happen next to cause a breach, to lead to the cognitive dissonance we portrayed as a risk outcome in the process of growing up in the school environment. My

conversation with Alex continued to ring in my head. I began to think about what happens to kids Alex's age, once out of pre-school managed learning and the safe confines of the contained classroom. The characterization of the 6th grader as a mobile executive suggests the child "has it together". But what we hear more often is that the 6th grade child is freewheeling and unorganized, quite out of synch with their teachers and parents about what it takes to keep things together. This characterization seems all too easy to make, all too "normal".

Clearly, the sixth grade child's world is about to change, the rules of engagement are about to change, and the demands on the tools children need to stay organized are about to change, unpredictably and to a large degree without warning, and without any additional preparation.

Let's recall the shell game and the magician to help us out.

Say the child is the pea and the classrooms are the shells.

Or, say the classroom handout detailing the upcoming science project is the pea, and the locker, the book bag, or the spot under the pile of books at home on the desk are the shells.

Or say each of the teachers is the shell and a knowledge kernel they each possess is the pea. In this case, there is clearly more than one pea, and there are obviously more than three shells.

So things have changed. Not only do we have to deal with the added challenge of taking things home and back, but it's much more complicated than that. As quickly as the magician's frenzied hands swayed in rhythmic fashion with no apparent pattern, the first handout has gone missing, the first homework has been mislaid. Or maybe the pea of knowledge that the child was supposed to have uncovered in the teacher's mind was not found. Unfortunately, this time the child is the one in the hot seat. It's quiz time, shudder, and the answer space on the test paper is left blank, once, twice, and again.

The teacher or the parent is not the magician at the carnival sideshow; the child is that magician, on stage for all to see. The experience doesn't lend itself to dismissal on the grounds of trickery. The child is "running the show" and is the one at risk. It's the child's hand at work. How embarrassing would it be if the child was really the magician performing the stage act in front of an audience and the pea had gone completely lost, not to be found under any of the shells?

The impact of this experience is dramatic. We know that the child is aware of how he or she is perceived. At this point in development, the child cares deeply about perceptions of not only teachers and parents, but especially peers. Accepting this, it becomes easier to understand and to remember how embarrassing it is for the student in the classroom to misplace something.

And what happens next is all the more appalling. The child, confronted by the teacher whose voice is getting louder and more berating, is dressed down in front of his peers for being unprepared. Further, a mark is made in the child's permanent record, and a note is sent home to let the parent in on the situation. This is as much a trauma for the child as it is for the teacher.

Isn't the first time this happens enough? How many more times does it have to happen for the child to experience self-doubt, to lose faith in "being organized," and to find excuses or lose interest as a way to rationalize the flaw. There are various ways the child can confront this situation, but the net result for all is about the same: disassociation. The risk is that the child will increasingly link the process of being disorganized with performance difficulties in learning and give up on trying to learn.

How can a child reach his or her full potential when this occurs? We can say it's not the child's fault. Maybe, as in the shell game, they never saw this game before, they weren't taught the skills to prevent the first occurrence. But we don't say this. As adults, we make a leap of

confidence in what the child can and should do. We make assumptions about their functional skills as we see them behave more like adults in other activities, and we create a gap for them to cross, a gap that we make increasingly wider the closer they get to it.

Even though we picked a sixth grader in our example above, where resilience is a lot greater, the blow of such a confrontation as the one depicted above is more than many can handle. The younger the child, the greater the risk. What we really want is a process in which effective organizing and positive learning experiences are linked. Ideally, we want a process that engenders positive self-esteem, so the child can be energized and better able to focus on and take charge of learning the content. The risk with being disorganized is that the child becomes frustrated, develops a negative self-esteem, links this to an inability to deliver content and by association, links this to an inability to learn. And the spiral gets ever tighter as the loss of touch with content inevitably leads to the inability to make simple inferences, the true basis on which teachers measure “smarts”. By first losing touch with the “media” they have to own and to produce, they lose touch with its contents, the part intended to foster their individual learning. As a result the child dissociates and becomes suboptimal at learning.

In the next chapter I employ another metaphor, comparing workflow and the hundred year storm, as a way to help us see the true nature of “the dilemma”. In this story, the deluge of a flood allows us to portray a student’s day in the matriculating class room from a completely different and very useful point of view.

- Who’s Minding the Storms?

Levees, flood plains, and the 100-year storm

By providing pre-defined structures and supports for a child along the “learning way”, we provide easy step by step solutions that enable success in the delivery of knowledge. In our effort to ensure that the knowledge delivery process is smoothed out, we put up the road signs and hold our children’s hands as they walk down the intended paths.

We’ve seen what happens when the child enters a matriculating environment where he or she is confronted by new teachers, each with different styles, demands, and performance criteria. In this characterization of the dilemma, the child is on the hot seat and has to perform or lose. Losing has some severe consequences and can be emotionally damaging.

We can all feel OK worrying just a little about how the fragile document handling and information processing models which may have evolved along previously structured paths will hold up under the multidimensional assault that they will unwittingly face. But what should we really be asking ourselves? What is the real dilemma?

Let’s take a look in on a town facing an impending rain storm to see if we can develop some further insight into what’s really at the heart of the issue.

We have the great advantage of knowing what’s happening around us, and the notion of “around us” has certainly expanded to include our state, our country and the world. When a disaster strikes in any form, we know the location and details, and share in the agony of the victims. Picture then the disaster brewing in the form of a severe rainstorm. Dark, low-slung clouds are forming on the horizon, with a forecast of severe, continuous rain. We know there is a risk of flooding. Homes have been moved off the flood plains and located on higher ground as a result of past experience with rising waters. Based on our recollection as a local society seeking to preserve our safety, levees have been built to defend against any unwanted quantities of water.

Then, as the worst would have it, a 100-year storm strikes and furious waters rage with no sign of quelling. A levee breaks and a neighborhood is flooded. The National Guard and the local people flock to the site and sandbag the break, but it’s too late. Successive portions of the levee go with the resulting loss of all things sacred.

Could this be what it feels like for some of our children at school with the continuous

deluge of work, papers, activities, and responsibilities? Let's put the developmental strength of the child aside as well as the resilience of the document and information handling model that they bring to the table.

Isn't the real question, if we built their levees and they broke, are they equipped to build new ones themselves?

Do they have the sensitivity to know when and how to shore them up as they sense an impending break? Do they have stockpiles of sandbags ready, and squadrons of bulldozers on call to respond to any emergency?

If they were passive beneficiaries, having inherited a town built levee, we can all see the downside. By inheriting brittle "organizing levees" built to solve narrow workflow problems, are we not "handing over the keys to the city" without any assurance the new owners can preserve the assets they have been given? I suggest the core issue then is not whether we have given the children a good enough solution for today, but whether we have taught them enough about the underlying principles so that they can fashion solutions for themselves as the conditions change. We know that we cannot prepare our kids as meteorologists so that they can "control the weather". But we can make them better forecasters, and better dam builders.

I suggest that is the challenge at hand in the job of teaching kids to become great organizers and great learners. So as you look at your child, at home or in the classroom, what constitutes the levee and the sandbags in their life as they confront the thunderhead of a school workload? Do they know how to rebuild the channel if it breaks or to create new ones for changing circumstances?

What if a 6th grade child could actually emerge from the experience as "mobile executive," thrilled and delighted with the process? Isn't this the opportunity at hand? Wouldn't it be wonderful to enable each child to secure an outcome where they personally develop a sixth sense for uncovering new means to succeed, means that they find successively on their own, that results in a measurable net gain as a learner.

Best of all, what if, as a result of our effort, these children developed means that provided repeatable results which could serve as building blocks, to be combined with the other "means" that they are now enlightened enough to develop for themselves. In this way, they will be the builders of their own levees. If this were the case, we would have succeeded in enabling them to take the deluges which inevitably lie in their path in stride, and in the process, become strengthened by them.

Yet, not all children are fortunate enough to have even the basic tools to move into this work space. And even if they did, many may not be mentally matched to the task. Many may not understand the application to the extent necessary to channel their workflow. These are the kids whose book bag, desk at home, or locker at school is an irregular array of bits and pieces over which the child has no knowledge or control, a flood plain on the worst day of the decade.

What if there were a set of tools for document handling that taught underlying skills needed to become self styled organizers and content focused learners? If we could build these tools today, wouldn't we want each and every child to have the version most suitable to their age so that they could be best prepared for the learning opportunities ahead. It would be great if just by telling the story of the flood plains we could solve the problem. And what if this story were only one of a thousand stories that could trigger the child's inner workings to develop the skills to get organized and "keep it all together." A story might give the child the insight needed to understand the organizing task at hand, and motivate them to deal with the tasks without feeling diminished at first blow. But a story is not enough to enable each child to find themselves and to become self-organized.

We need tools to do the teaching and they need to be self teaching tools. The next step for us to take then, is to deal with this head on and construct the tools we say we need. The good

news is this task is done! Let's see what we have come up with and why.

## Part 2- What To Do

- Selecting Transitional Systems

Training wheels for the mind

If the job at hand was to solve the problem of intercontinental travel on demand, with scheduled departures and arrivals provided on the order of hours as opposed to days, it would be clear that we were asking for the development of the commercial airplane. We would not only need the airplane, but we would also need experienced pilots. These pilots would need to be trained. So it is also clear, we would need tools to train them, since it would be too risky to start new pilots off in multi-million dollar craft.

Let's look at this situation a little bit closer and see what we would need to do to train the pilot. For one thing, it would be helpful to give the prospective pilot a fundamental understanding of flight. It would also be important to give the trainee a feeling for what flight involves. Then, it would be important to begin the actual flight training with direct experience. This flight training might begin in something called a simulator. Next, there would be direct flying in planes designed to teach basic flight principles. Finally, flight training with an experienced instructor would begin in the exact type of plane the pilot was being trained to command.

If we pick apart the steps for a minute, we can see that at a certain point in the process, there is a training plane and there is the "end game plane", the real thing. The training plane might be a winged parachute with a single prop engine attached to a seat. It would have some of the basic features of a real plane which would be presented in a way to ensure successful use with minimum risk of failure. The training "tool of the trade" would deliver and teach the critical features needed for problem solving in the chosen application.

The training plane is an example of a transitional system, what we will also refer to as a

tool kit. In the same way that the pilot made advantage of his training tool, the child in the class room needs a training tool to help them get organized with documents. Before digging into the tool kit that solves this problem, let's take a little closer look at training tools used as transitional systems and make sure we all agree we really need one for document handling applications. To bring home the value and use of such training tools, let's look at an example we are all familiar with before attempting to tackle the job of describing a good transitional system for the document-handling application.

Do you recall how you learned to ride a two-wheel bicycle? There are some generational twists here, of course, depending on which decade of the 20th century you became skilled in the balancing act. You probably rode something with more than two wheels before achieving a successful go on a stand-alone two-wheeler. The "trainer" had the peddling feature but was stabilized. In its most recognizable form, the training wheels were attached to the rear wheels of the two-wheeler. Each training wheel could be slid up and mounted higher than the bike's rear tire to simulate two-wheeling while providing the fall back of touching down if you lost balance.

In this illustration, the wheel supports were the "transitional system." They served as a physical support system that provided a temporary role in an effort to enable you to safely develop a set of joined skills which would, once combined, allow you to perform as a bike rider. On the first trial with trainers removed, you probably had the firm hand of your older sibling, friend or parent on your seat providing support as you peddled into biking history as a successful and expert biker. The firm hand was likely a memorable part of the personal experience. Fact is, the teacher couldn't ride the bike for you. You had to do it for yourself.

What I propose is that we find a set of "training wheels for the mind" that is geared to get the user familiar with the basic balancing principles of document handling. There are desks with draws, book bags, dual pocket folders, and binders all designed to solve the problem of kids getting disorganized. Aren't these good enough? The fact is they are not. We need a tool that teaches and it's going to be different than the things we have used up until now. In the same way that the rock climber needs a unique and different set of tools to succeed, so the child in the class room does too. Let's look at rock climbing for a moment before we get into the details of our tools

- Let's Go Rock Climbing

What kind of tools do we need?

It's one thing to acknowledge the role of the flight simulator for the pilot, or the training wheels for the child learning how to bicycle. Do we really need special tools to teach organizing? To entertain the idea, it is helpful to put the nature and the development of such tools into perspective. Let's take a side trip for a moment and go rock climbing. Through this little diversion, it will become clear that powerful and special tools are the order of the day for solving hard problems in any tough application.

I think we all know what rock climbing is, can define it, and specify the tools we need. For one thing, we need a shoe with good grips, and we could use some protective clothing. But, hold on. I didn't say if we were climbing the hill around the corner or the peaks of the Himalayas. Changing the level of difficulty of the climb changes everything. For each situation we would need something different.

What is the point I am trying to make? Take a walk into your local outfitter and check out the climbing equipment. Pick up any tools of the trade, describe them and then explain their specific use. Then, without any instruction, like a mime with props, demonstrate them as in a real-time climb. Good luck. I think you can anticipate what will happen. If you don't believe me, go ahead and try it. Then come back and read on. To assist you, I have included a few examples of the tools you will likely have found, see Fig. 1, below.



The application is more complicated than our first impression would lead us to believe. Did you find belay and rappel jaws, cable-bodied cams, various sizes and shapes of carabiners and a multitude of harnesses and ropes? The tools needed to perform successfully in the application are unique for the task. As you can see, the tools are like nothing you have ever seen before. Climbing is, in fact, hazardous to your health and requires a health warning.

Is organizing hazardous to the health of our young novice learners? Let's take a look at the application "document handling for the elementary schooler." Let's see what the tasks are and what is needed for success. I present the 6 C's for you to ponder. I trust you will agree that the rock climb we are asking our kids to make in the class room is more akin to scaling the Himalayas and that a set of power tools is indeed the order of the day.

#### •Characterizing the Application

From photosynthesis to infosynthesis and the 6 C's

The application of document handling for the matriculating elementary schooler involves a number of activities. To assist us in developing a clear picture of the requirements, I would like to employ the use of another metaphor. This time, I suggest we use the process of photosynthesis to help us. I would like us to become leafy green plants for a moment. As a plant performing this life-sustaining process, you take in available light, draw nutrients through your roots, absorb carbon dioxide from the air, and through a chemical reaction, generate useful by-products that not only nurture you but also return oxygen to the outside world.

Let's look at this activity from the point of view of "input-process-output", and consider the plant as a factory that converts energy into useful products. The sunlight, carbon dioxide and nutrients are inputs. The chemical reaction using the cell structure and chlorophyll is the process. Life-sustaining material and oxygen are the outputs. Some of the outputs are returned to the atmosphere while some are stored internally for use later.

Now, permit me to invent a new word, "infosynthesis", to describe what the child does in handling documents in the class room. Let's reuse the metaphor of the plant to help us understand what each child does as an infosynthesis factory. Once we have agreement on this, we can better understand the general construction of our tool kit.

Let's start by changing the sunlight into the streams of information the child is being asked to process, arriving on paper, digital waves, teachers voices, and parental dialogue. The process, then, involves the conversion of these streams into knowledge. This is a multi-part

activity in which the child gathers together related materials and forms new ideas using a unique chemical process we call thinking. The output step is the activity where the child communicates their ideas in a variety of forms, voice, digital, and of course documents.

This gives us a meaningful way to look at how the objects in the environment play together. It allows us to think in more detailed terms which help us sort out the part or role each child plays in creating knowledge for themselves within the measured environment of the school classroom. We find this student repeatedly performing what I will call the 6 Cs:

Capture , where the child records the information received verbally in the form of class notes, gathers handouts given out by the teacher, or collects back works which were handed in at an earlier time;

Categorization , where the child decides what kind of paper it is and where it should be put away, i.e., is it a test that was just returned or a guide sheet for the upcoming report defining a project for work that will need to be created;

Consideration , where the child studies the papers he or she has gathered in order to develop an understanding of the subject and to form new knowledge;

Creation , when the child produces a new piece of work, using knowledge and experience, whether it be a homework solution, completion of a test/quiz or generation of a report;

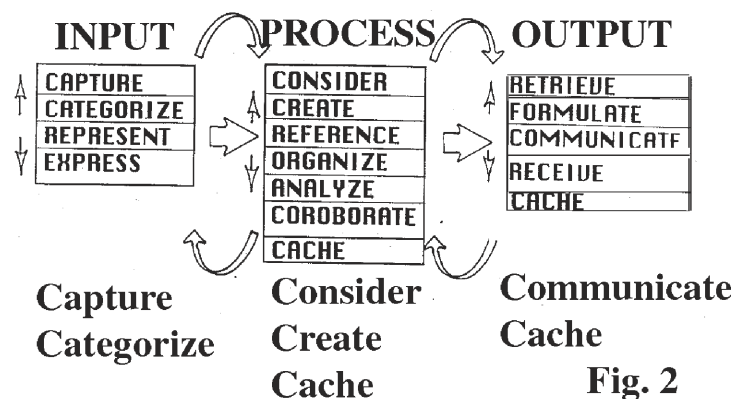
Communication , when the child lets others know of results, be it by handing in a test, turning in the work completed as a homework assignment, or presenting ideas openly in class; and

Caching, when the child takes completed work and moves it to a selected storage system— somewhere on the desk, shelf or floor—for reference at a later time. The word “caching” comes from the word “cache” which is a storage area.

To assist our analysis of the application requirements, let's use the I/P/O framework and fill in some of the specific activities that are actually being accomplished. Let's start by thinking about a single subject, realizing full well that what we are saying is content independent and lends itself in a similar way to every subject. To characterize the typical classroom setting of a matriculating 6th grader, let's use the conventional actions which we can easily observe as they occur on “main street”. Entering the classroom, let's observe the behavior of a student.

The input activity is clearly the capture step and the categorization step. Processing involves the steps of consideration and creation. The output step involves the activities communication and caching.

### Make Workcenter Organizer Work For You



Further detailing the manner of behavior of this student, and posturing this behavior as that of the successfully organized student, then the following is also true. The organized child has their current workflow, a unit context, “in hand”, in one place, and knows where each and every piece of the unit is. The child is carrying around the minimum amount of this useful material, only the material relevant to what they are expected to know, that day, that week, for that unit. Further, the successfully organized child can on their own, retrace all of the steps they took in acquiring the material, i.e. study contextually. They can separate the acquired materials by type, whether notes, homework, handouts or the like, as well as show how the parts are related to one another, even if the material was accumulated a couple of months ago.

In summary, as in photosynthesis, the infosynthesizer absorbs the information coming in, processes it, and outputs it. As you can see, the application requirements of the “successfully organized child” are very demanding. The bottom line is that the student must be able to recall, on demand, any piece of work by type, as well as demonstrate an understanding of that material, longitudinally, i.e. for the entire term. The ultimate test of the organized student is their ability to establish a study environment which presents this material in a ‘reconsumable state’, on demand, and especially at the end of the third week of December when finals hit. Multiply this by a complexity factor of at least five, since these requirements are demanded by each of the teachers for each of the subjects the child is taking. Considering this, it becomes very clear that the task of organizing documents for the 6th grader is non-trivial.

As the green plant in photosynthesis has its cell structure, we need a tool suitable to the task, to act as the “cell structure” that can be used to handle that information. If we are effective in providing a such a tool for the student to use, then the student will be effective in their classroom behavior. They will act in a way that returns the benefits of learning to the environment in the form of useful work. At school, it’s solutions to work assignments; at the office it is solutions to day-to-day challenges that are encountered. This is a continuous process, one which requires an ongoing exchange between the infosynthesizer, the tool provided, and the outside world, be it school, the workplace, or home. Before delivering on the promise of the tool, let’s define the workflow in a bit more detail.

- Characterizing “Our” Domain: The View From the Classroom

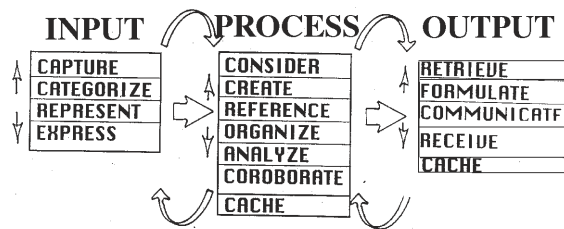
The things, the actions, and their meaning

The 6 C’s, cast into the steps of Input-Output-Process, are a good start at helping us to understand the document handling challenge of the 6th grader. In order to be in a position to design and build a tool kit that is complete and useful, we will need to get into more “hard-core details” of the application. The simplest and best way to get into this detail is to classify the various documents the student handles and what they do with each type. By specifying “correct” actions typically performed, we will have the design input we need to structure the tool kit. We need to do this using the lowest common denominator of behavior with each document type.

Let’s take a “transactional look” at workflow for a typical subject. Fig. 3 depicts the IPO setup and shows a list of documents handled in each step. Every day, the student is exposed to inputs, information transmitted directly by the teacher. This information provides the fundamental subject matter and is delivered through discourse, hand outs, and assigned homework on specific topics in the current unit of work. The student processes this information by conducting analyses, doing projects, and by taking tests at the end of successive units. The student then produce outputs as reports, tests, homework, and presentations. At the end of a term, the student is often tested on all of the material covered.

The picture below shows each activity below the functions input/process/and output described earlier, and lists the respective activity as the major heading below each function.

## Make Workcenter Organizer Work For You



EVENTS-CALENDAR	HOMEWORK DONE	TESTS & QUIZZES
HOMEWORK-	NOTE PAD	TRI-PKT
ASSIGN	TRI-PKT	REPORTS HW RTN
CALENDAR	STUDY NOTES	TRI-PKT
CLASSNOTES-	NOTE PAD	
NOTE PAD	BOOK PKT	
BOOK PKT	REPORTS/PAPERS	
PROCESS NOTES	NOTE PAD	
TRI-PKT	TRI-PKT	
HANDOUTS-	PROCESS NOTES	
HOT SHEET	TRI-PKT	
REFERENCE	AGE WORK PRODUCT	
BOOK PKT	ARCHIVE	
COCOON WORK CTAS	STUDY FOR TESTS	
	CURRENT COCOON	
	WORK POCKETS	
	ARCHIVAL BINDERS	

**Fig. 3**

What path does a document take for your typical 6th grade elementary school student as it moves from the teachers hand, onto the desk, through the binder, and into the book bag? Does the teacher or the parent know where the papers are? Does the student know where the papers are when they really need to find them on demand? Let's move on and see what we should expect from a tool kit that can be used by a student to become a savvy document handler.

- Establishing Design Goals for "Our" Transitional System

What our tool kit can help us accomplish

Recognizing that the climber's tools are uniquely suited to the daunting task of scaling tall peaks, it's no surprise we need to select a different, more appropriate set of tools for our difficult task, organizing an elementary schooler. And, in the same way that the climber might practice on a "rock wall" with safety ropes to prepare for a new type of mountain terrain, what we need to do is "engineer" the equivalent of the rock wall and safety ropes. In this way we will be able to deliver a new and more meaningful experience in teaching organizing to children.

What design goals we should have for our new tool kit?

The first goal is to provide an environment with a set of real world physical features in which certain types of "processing" similar to those found in the real world are relevant and are valid. In the process of "behaving" in this environment, the user is able to successfully navigate, explore, and solve problems without risk of catastrophic failure. The goal is to provide a system that allows successful execution of tasks without significant disturbance. In this way the transitional system enables the successful completion of tasks and goals for which problem solving is required, and in this way teaches the desired behaviors.

A basic design goal of the tool should be to assist in teaching the principles of document handling in such a way that the student stays organized in the classroom, day to day, week to

week, month to month.

We want to provide an environment that is relevant to the goal of being good at document organizing for school work. In the same way that every language has a grammar, our transitional system should be consistent with the grammar of “organizing”. For the system to have a “grammatical” structure that is supportive of organizing, it will need to have a structure that will allow any user to communicate with him or herself over time as well as to communicate with peers and with others who have participating roles in the larger world.

Inasmuch as the child might be led by a mentor initially, we need to assume that the child is ultimately responsible to him or herself for learning how to use the tool. Therefore, the tool must be easy to use, sensible, and self explanatory. The use of it should result in the behavior we want to teach to the “inner self” of each child.

The tool should be modular, so that children with different learning styles can select the parts of the system that most fit their needs. Further, it should be possible to use each of the parts separately. The parts should be able to stand alone. In this way, each child should be able to make the decision to jettison parts of the system, at will, without the system breaking down.

The tool should be fun to use. As in the metaphor of photosynthesis, it should be fun for the child to step into the metaphor and have the process make sense. It should work without a hitch. In line with this, the tool kit should allow each of the input “bits and pieces” to be handled in a way that permits timely processing and output. It should permit each child to take the material that needs to be handled on a unit-by-unit basis, and keep the information together, while making it easily accessible on a piece by piece basis.

More specifically, the tool kit needs to be designed to handle work on a unit by unit basis. For each unit, the inputs and the processed outputs should be easy to group into “document contexts” of knowledge. The tool kit needs to handle this batch of work effortlessly. In deference to the word “portfolio” which is used to describe a group of related materials produced by a student and stored together, I will call this group of unit level content that the kit needs to handle a “context folio.”

An even more important goal of the system should be to encourage the child to carry around the minimum amount of relevant material. This means that it should be as easy to take things out of the system as it is to put things into it. Further, the design should allow things to be taken out in groups by context. Documents should remain separable by type, so that both the individual entries as well as the groupings can be preserved for later reference.

In summary, we need to provide a tool kit that can “do the teaching”. The tools must make good sense. They must embody the underlying principles of organizing intelligence in the way they work. Further, the tools need to be built so that the child, him or herself, can readily observe the best practices, pick these practices up, apply them, and own them. Ideally, these practices should be easily observable from the way that the tool is being used, what we might call “transparent”. This would permit a teacher or parent to do a “state check” on both the level of organization and the completion of content, as well as permitting students to imprint the best practices from one to another.

Such a tool set would naturally lead the student to discover their own ability to get and to stay organized and would be the catalyst for more powerful ideas generated by “self-directed organizing breakthroughs”. The tool should support these breakthroughs and allow the child to rapidly prototype these new methods in the tool itself. In so doing, we will define a tool for the child in the classroom environment that provides a clear-cut “user interface” and that more or less specifies the “grammar of document handling”. Looking at this grammar will provide us with needed insights and help us to codify some new principles of organizational intelligence.

In the next step, I present a tool kit designed to have properties that meet the above design goals and that can act as an “assistant” for document handling. We call this transitional system our Workcenter™ Organizer and present it in the next section for your consideration and

appreciation.

- Delivering Our Transitional System Tool Kit  
Tools of the trade-Workcenter™ Organizers

A tool kit such as the one we are suggesting can take on many shapes and forms. First, since the application area we have selected is a very tangible one based on documents, it should be no surprise that the tool kit we propose has features supportive of handling papers, in particular, pockets. In and of themselves, there is no magic to pockets. We wear them, hold food in them, carry around personal items in them, as well as keep collectible cards in them. Each “deployment of pockets” is tailored very much to the application, including the size, shape and materials used. Since our environment involves far more than just “capturing” things, it’s no surprise that our “pocket world” is a robust and unique combination of pockets.

As you know from experience with existing school organizers, pockets and papers can be kept in open/close ring binders, spiral or double wire notebooks, file folders and the like. In this section, an overview is provided for Workcenter Organizer products configured for use in open/close ring binders. In Appendix B, additional binder configurations, wire book solutions, and archiving solutions are discussed.

The Folio Workcenter™ Organizer, Fig.4, is a universal , “all-in one” document organizer and record keeping kit for students, teachers, and parents that want to get the most out of their learning, teaching, and coaching experiences. The all-in-one solution is a powerful and economical alternative to keeping separate school organizer and paperwork binders, providing a uniform, simple, and personally configurable design that combines forms handling and document management. Folio Workcenter™ Organizer for binders is structured to work for the entire school year and is the only system available that handles all of your record keeping and document/paper workflow needs in one place.



You will recall, in infosynthesis, the student acted as a “knowledge factory” where the factory’s work entailed the jobs of capturing, storing, ordering, analyzing, processing, and outputting records of information. Think of the WorkCenter tool kit we are about to describe as the factory part. We can identify the “factory’s compartments”. They are a set of specially configured pockets, each customized to handle the kind of information you expect in each particular task for a subject. If you prefer to think of the Workcenter Organizer as a flood control system for handling the information deluge, then the pockets are the sandbags that form the levees. The Workcenter Organizer, including its supporting record keeping components, is an all-in-one system that provides a dynamic framework in which to process time critical school work, represented as documents, in each of your subjects.

Since you handle documents in two separate time frames—documents you need today, and documents that are completed but need to be referenced at some time in the future—the system is segmented by active work and reference work. The two basic parts of the system are the transaction work pockets for day-to-day record-keeping and the archival storage binders for storing completed works for later reference. In this section we focus on the day to day binder.

The Folio Workcenter Organizer is a kit of specially designed forms and pockets for three ring binders. The kit helps you manage all of the events, plans, and papers for each of your subjects. The binder kit provides a sensible place for each and every kind of paper you handle so that papers can be quickly stored and accessed, day to day, week to week, and month to month. The system is comprised of a set of Transaction Binder Inserts. The Transaction Binder Inserts are for use in your daily three ring binder. They help you to keep everything you need to stay organized, day by day, in one convenient location.

The Transaction Binder Inserts include(See Fig. 4 and Appendix A):

- (1.) One or more Workcenters- A pocket set of 3 color coded pockets which acts as a single subject’s workfile. A workcenter has an outer, dual pocket Subject Portfolio, and a nested Tri-pocket and Book pocket. The number of workcenters you have is determined by which workcenter kit you have purchased.
- (2.) A set of preprinted labels-for marking each of the pockets by category of work done. The preprinted label sheet has a set of self-tabbing labels for tabbing subjects and archives
- (3.) 4 Copymaster™ Forms- for managing events & info:  
(these forms may be reproduced as needed):
  - (a) A Self-Dating™ Calendar for recording dates for important events and scheduling commitments
  - (b) A Homework By Subject Table for recording homework separately by subject
  - (c) A Homework Planner Table for listing work to be done weekly, for all subjects
  - (d) An Important Information Table for keeping important numbers, information, and lists  
( there is an Important Information Table printed on the face of each tri-pocket)
- (4.) A PopPad™ with specially formatted Notepaper2000™ for daily note taking.

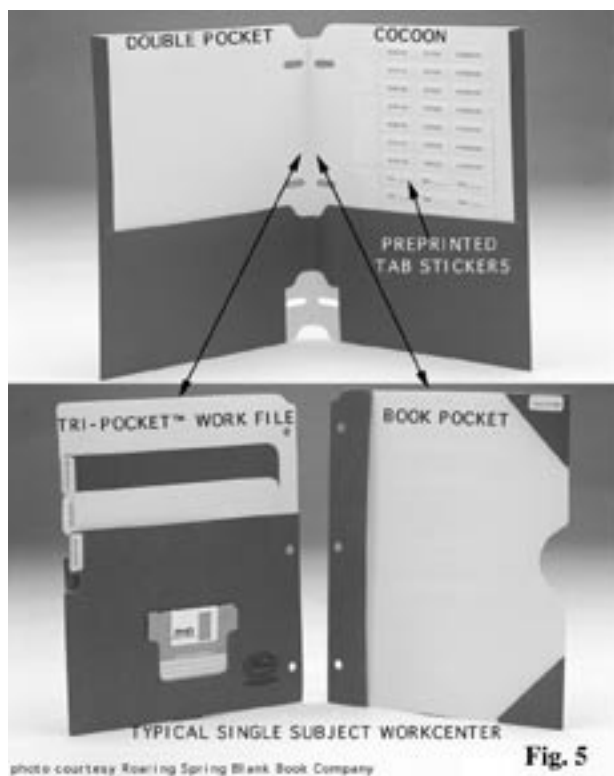
These transaction binder inserts go in the binder you carry and use daily. Place a workcenter into your binder for each of the subjects you need to organize. The workcenter is the place for your “unit and task critical” work in each of your subjects. The pockets act like the file

system on your computer to hold all the current stuff you have collected. The forms are designed to collect all of the other records you will need to keep. If you use all the forms, you won't need to carry around a separate calendar organizer. Now for the surprise. Go back to Fig. 3 and take another look at the sub headings under each functional activity. There you will find the part of the Workcenter Organizer that provides the support for each of the Input-Process-Output activities that are in the 6 C's . The next section explains this support. Refer to Appendix A for more details.

- A Close Look At A Workcenter Pocket Set

Nested pocket configuration provides a place for everything

It's helpful to take a closer look at an actual workcenter. This is the most important part of the system and the part that is the easiest to use. A workcenter is comprised of a color coded outer set of dual pockets we refer to as the Subject Portfolio or the "cocoon". Each cocoon has at least one color matched tri-pocket and book binding pocket. These are shown in Fig. 5 below.



Day-to-day, there are a variety of related tasks that one needs to perform in order to stay organized in each subject. These pockets provide a unique set of compartments, each customized to handle a particular kind of document associated with each daily task you perform. Among these tasks are notetaking, completing homework, taking tests, keeping track of subject specific tasks and their results, as well as handling a variety of other types of hand-outs. Since these "process" tasks are performed in a subject independent way, the kit system provides a similar configuration of pocket compartments for each subject. A workcenter™ is the configuration of pockets used to organize documents for a single subject.

The content kept in the pockets, represented by each of the different kinds of documents you create, collect and store is the "topic critical" subject work for an active unit. As you will recall, we will refer to the collection of active work for a unit kept in the workcenter pockets a context folio™ .

To complete the design of the transaction part of the system, we need to consider the other tasks that are performed “outside” of each subject, such as master event scheduling and homework planning. Copymaster™ forms and Pop Pad™ with Notepaper2000™ are included to assist with these tasks. The all-in-one system is a collection of workcenters which are grouped together along with the copymaster forms to create a document handling solution for the student. Further details on the Folio Workcenter are provided in Appendix A

### Part 3—Real School

- A Good Example of WorkCenter Use: Fay School

A picture , a metaphor . . . hey! what about experience?

We are at the point in our discussion where we can make some direct observations from relevant experiences of real kids in real classrooms using various configurations of these tools. These observations allow us to see the multiple roles of the child as well as observe the relationship of the child to the information. It is immediately clear that the child is an integral part of a much larger environment, with teachers, parents and other students. Let’s take a look at the Fay School in Southboro, Massachusetts, for a good example of how the Workcenter Organizer is deployed and used day-to-day. We will do this through the eyes of Jim McDaniel in his role as Headmaster of the Upper School, grades 6 through 9.

It’s registration day and Jim McDaniel, headmaster of the Upper School, enters the registration floor in the library conference room. He works his way around the tables and casually notes that the Workcenter Organizers are neatly piled up, ready for distribution to each sixth and seventh grade student. The full kit provides a complete complement of pockets, copymaster forms, archival binders, and notepaper to get the students organized for all their subject work.

He recalls the checklist of readiness preparation which included having a team meeting at which teachers agreed on subject colors for the color-coded Workcenter cocoons. During that meeting, a number of issues were settled including the way in which effort grades would be tied to the organizational readiness the kids would be asked to demonstrate at various checkpoints throughout the term. With excitement, he also recalls a question was raised about getting additional pockets for kids in upper grades who were returning and that would be interested in integrating them into systems of their own design.

His mental inventory quickly passed to the neat corner in the bookstore where all of the

additional materials were already in place. He flashed back to the time when he had his closet filled with materials so that kids could come into his office to stock or restock on kit items they needed. Those days were now long past, as a regular system for supply and distribution was working automatically.

Jim reflected on all the hard work that had gotten him this far along, with a total system that offered so much more than providing school “supplies “. He had established the “Fay way” for keeping kids organized with their day-to-day workflow.

It seemed like just yesterday when the sixth grade team was wrestling with the challenge of how to improve on the system used to help the kids handle their paperwork. With an indexed, dual-binder system splitting the total number of subjects between both binders, things were working. Joanna Wishart, head of learning services and 6th grade teacher, had trained the current teachers with the system. They were familiar with the tabbed binder setup and had developed ways to use it.

However, little problems multiplied in everyone’s mind. There was a gnawing sense that the approach could be revamped and improved. Kids didn’t always have the right binder for the class they were in. The two binders were bulky and weighty. And more often than not, papers ended up loosely filed and ultimately stashed into a book bag or locker because they were never properly fitted into the “right location” on the overstuffed rings. It was clear to everyone that completed work, work that was really ready for archiving, was being piled in with day to day transaction work. As a result, mounting papers could not easily be properly labeled and split out. Jim had noticed a student, Zack, that was using a configuration of pockets to hold unit specific work with separate binders where archiving of work by “type” and time was easily done upon unit completion. Jim had noticed that Zack had made great strides and his performance was way up.

The time was right. Jim approached me to see if the system Zack had could be made available to his class. It was agreed that it was time to try a new tool. What better opportunity to see what could happen! Certainly there was little to lose. Maybe this tool could help some of the other students get focused on their work and improve their school performance.

Maybe using a new system would energize the teachers and the kids and lead to a new process for managing the content side of the newly updated curriculum.

Thirty Workcenter kits were provided to Zack’s class mates upon return from Easter break, and a trial run was begun. The improvement in performance for the trial group was quite significant and therefore warranted expansion of the program to the entire sixth grade class for the upcoming fall term. The decision to provide the kits as a standard issue made the continuity of care a straightforward matter for the teacher’s day-to-day. Certainly if Science was blue, and the class was called to order, unless there was a sea of blue staring the teacher in the face, it would be immediately clear who wasn’t “on the same page.” Getting the kids to understand the layout of the pockets and the path of paper through the system was never a hurdle. The kits needed assembly, but by the end of the first day, each child had a harmoniously organized binder.

The buddy system took over as a natural selection process, until each child’s basic binder layout was in line with the teacher for that classroom. The best part was the pockets were labeled according to “process” so the labeling was the same for each subject. Where necessary, some fine-tuning of a Workcenter would be done on a subject-by-subject basis, such as in English where the teacher called for three document pockets—one for grammar, one for vocabulary and one for composition. Each pocket could be used in whichever way suited the teacher. The older kids realized they could use the pockets according to personal organizing preferences, once shown some of the basic techniques and approaches. The bottom line was that the kids all had the benefit of a kit that allowed them to put their papers away without having to open and close the rings. And there was a place for everything and everything could go into its right place every

day.

When it came time for streamlining the material the children were carrying around, the task of archiving was handled differently in each instance. The math teacher, Mr. Carlson, liked to archive in class, so the math storage binder that came with the system was kept in a special place in the classroom and the material emptied into it at the end of each unit. Whether the child was expected to archive on demand at home or had direct support in the classroom, when it came time for the first test, the playing field was leveled as each student worked from a context folio comprised of the homeworks, tests, and class notes for that unit.

Since assignments were recorded on a sheet which was stored with the homeworks when the pack of completed works was archived, there was actually a list of each of the homeworks as a separator for the homework section of the archive. What better way to have a reference to the work done, and quick access to the actual papers which were graded and corrected. Since homework questions were often given on the tests, seeing the right answers again and remembering the correct way to do the problem was pretty handy. And if the child was out and missed an assignment, it made it easier to fill in make ups in time to study for the test on the material.

The in-classroom experience for the teacher and the child was equally rewarding. Each day, classes started with an overwhelming majority of the kids producing their homework or the handout they were given the week before and had to reference again that day. The smiles on the faces of the kids let the teacher know that they had learned an important element of organizing: to be able to put something away and produce it again at a later time by locating it on demand in a short interval with no hesitation. Most significant, the effort grades of the class showed that the kids were now able to perform at a level that surpassed the teacher's expectations.

How much easier to go through a retrieval in unison and gather out of the in-class archive binder all of the papers for the unit on polygons—each test, quiz, homework and handout. Class time was truly dedicated to the content, the process side was well in hand, and each student felt like they were masters of their own workspace.

For Joanna Wishart, 6th grade English teacher, it was obvious that some students were naturally organized. But for many others, organizing was like a foreign language. It was something that they had to learn. When a student who had been quite disorganized, brought in his archive binder for an in-class study group, Joanna knew that this student had learned an important skill. Here was a binder, neatly compiled, with all of the papers needed to complete the review. The real reward for the student came when he was able to share a homework assignment with another student in his group that had been out for that work. A fast friendship was formed and the benefit of imprinting was at work.

Looking back at this “pilot project” of some four years earlier, Jim knew he was “seeing the future”. He knew he was looking at the tools needed to get organizational readiness embedded into the Fay curriculum. As with anything new, he also knew that he needed to nurture it and allow each grade to find the value and incorporate it's use into daily lessons. Picking sixth grade for standardization and allowing each class to carry it forward to the next grade, now, some four years later, every child in the school had “cut their teeth” organizing using the Workcenter Organizer. A sigh of relief could be heard as he went off to the rest of his tasks for the day. His thoughts raced briefly to the future, knowing that with this experience, he would soon be ready for the next step: to move the program down to the lower school, where the younger children could begin to develop some of these skills.

What we see at Fay School is similar to the experience of other schools that have employed the Workcenter Organizer in cooperation with planned faculty support. Hillside School in Marlboro, under the leadership of Rich Meyer, is another excellent role model for work center use that serves as a solution to emulate. Both these schools represent examples where the school has standardized on the use of the Workcenter for entire grade levels. This sort

of commitment serves to amplify all of the benefits of using the document organizer. Having a school standardize on use is ideal. However, this is not often the way things start. Usually, an individual teacher, a parent, or a student starts on their own. We are extremely encouraged by what we see on an individual basis. The teacher or the child is able to get a quick feel for the tools, using the user guide when needed, and successfully utilize the Workcenter Organizer for one or more subjects on their own. This allows them to move forward in the skills set area of document organizing.

In the end, providing the tool kit for use by just one teacher, or one child, in just one subject at a time may be the way the Workcenter Organizer gains wider use and acceptance. In any case, it is clear that the system provides an explainable and repeatable process that enables unevenly organized kids to get on a level playing field in the area of handling school papers. Of course, the content part is still the responsibility of each child. The bottom line is that no matter whether the child is an A, B or C student, the child feels much better about themselves and about the learning process when they are not in a struggle day-to-day with their parents about how neat or organized their room is or in a dispute with a teacher attempting to establish the whereabouts of some important papers needed to keep momentum going in the classroom. It is the good feelings about self that emerge when the work center tools are used that will allow the C student to become the B student and so on.

We need to support the process of document-driven knowledge acquisition with ample structure. Further, given the variety and the amount of work a child actually handles and produces, if we did not provide a place where everything could quickly and easily be put on a daily basis, things would certainly get lost. It is clear that if we didn't provide an effective archiving strategy, the chance that each child would produce all of the relevant papers needed at test time would be limited to the minority.

The result we are looking for is summed up best in this comment from Jim McDaniel, "what happens is that the relevance of being organized is imprinted on each student. This produces positive feelings about adults and school, and secures the relationship between efficiency and effectiveness in a rigorous and fast paced setting". More words are provided from Jim McDaniel in the excerpts section!

#### •The Flow of Paper Through the System An example-the science fair paper

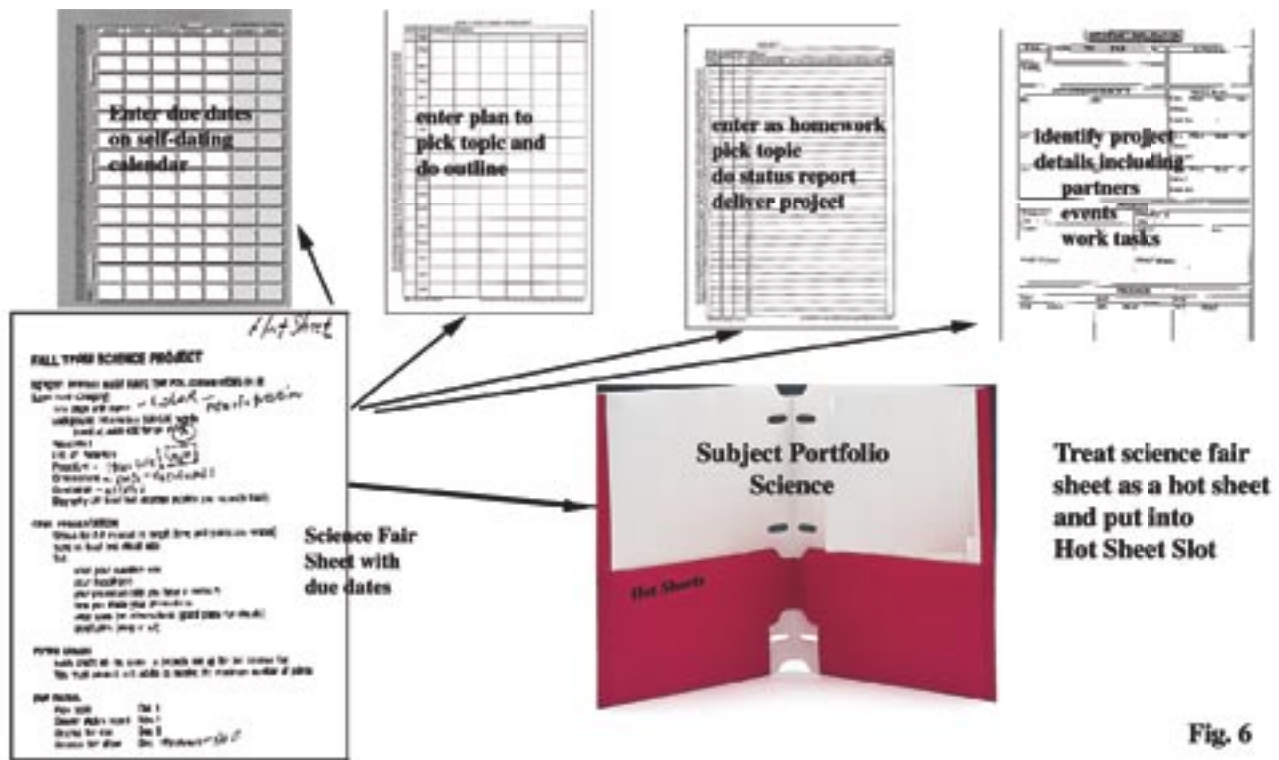
Following one "transaction" from start to finish will help you see how the system keeps you organized. The transaction we will follow details how to handle the science fair work sheet that provides rules on how to participate and important dates for handing in "deliverables." As we work our way through our example, it is helpful to remember that we are processing information that is time critical. We will be recording information about the time of the transaction, separating out and scheduling work required to complete the transaction, as well as handling the documents that comprise the transaction itself. Although most of the record-keeping and access is primarily for ourselves, the end result is to produce a measurable result, to deliver some "finished goods."

As you might expect, as in a good flood control system, each kind of paper and critical information about the transaction have a unique place in the workcenter system as well as a guided path through the system. Let's take a look at an example of what "you ought" to do with your science fair project paper. So simple a thing to do, using our Workcenter Organizer tool kit. Let's walk through how this is done.

It's September 20th and we are handed a piece of paper that tells us how to complete the science fair project, which, according to the sheet is due December 5th. The worksheet details the rules and deadlines to complete the project. First, we know it's a science "thing." We note

also that it's a handout. It contains important information in the instructions printed on it which include procedural definitions for how to implement a science fair project, how to stay within the bounds of what is an acceptable submission, and how to meet the schedule for completion and entry into the competition. This includes information about topic selection and approval, provision of a status report on progress and delivery of the goods to the fair tables.

So now comes the good part. Each of the steps needed to stay organized is very simple in and of itself. The workcenter pocket set makes it very easy to execute each step. Since the calendar and record keeping forms are integrated with the actual document handling, it's easy to have all your material in one place and stay organized. Follow the transaction using Fig. 6 below.



If we were to just leave this piece of paper on the desk when we moved to our next class, the chance that we would be able to reach our goal would be dramatically lowered. The nature of most objects is that they convey more information than we can simply retain in one viewing. We need other “external” ways to represent the information contained on the sheet if we are going to achieve the intended goal. Our binder contains a workcenter for each of our main subjects.

The “red” color coded workcenter is labeled science. Opening the science workcenter, there are pockets for time critical information, reference information, homeworks, tests and quizzes, as well as work due. There is also a place for handouts and for class notes.

The science fair sheet is what we call “hot”. It details a “project” that is time critical. The sheet tells us what we will have to do at certain times in the future. It identifies each “deliverable” and when it is due.

As mentioned, the science fair sheet also has task specific as well as rule specific information. This is the kind of information we don't want to rewrite in our assignment book. It would be fantastic if we could just reference this sheet again, each time we need it.

So, in order to make sure we can find the science fair sheet again quickly, we put the science fair sheet into the first pocket on the front of the dual pocket folio, labeled to hold “hot sheets”. This pocket is for documents detailing projects that have critical importance some time in the “near” future. We have taken the first step toward effective document organizing

Before closing our binder, we make three kinds of entries to ensure we will take the steps

needed to complete this project. The first entry is a set of calendar entries which call out the deadlines for work we will need to hand in along the way. We note the date the topic is due for approval, the date the status report is due and the date of the science fair itself. These entries are made on the self-dating calendar on the appropriate date. The next type of entry is a project notes entry made on the important information table on the tri-pocket divider. Here we enter the project name, we detail our team by name and number and mark the dates on the block calendar for reminder purposes. The third entry is a set of homework table entries. The first is made on the homework table for Science where entries detail the “pick topic,” do status report, deliver project. Each can be a separate line entry with the appropriate dates. A homework table entry is also made in the two-week planner where the work to “select a topic” is slated as “research topic for science fair project.”

The rest is up to the student to follow through. The document is handy for quick reference as a reminder, a sheet with all the requirements in one place. This sheet will be useful for recording notes the Science teacher adds along the way. As the student takes each step, the rest of the system comes into play. You can easily see how when the topic for the fair is selected, it can be placed on a sheet for approval and if necessary handed in. The day it is due, the sheet with the topic name can be placed in the work due pocket for science. Once approved, this sheet can become the sheet for making the status report. The sheet can be put into the hot sheets pocket in front of the rule sheet. It will serve as a constant reminder that you need to make progress and provide a status report. When you add your information to this sheet, it can become “work due” the day it needs to be handed in. The storage and access of papers related to the completion of the project go on hand-in-hand with the recording of key data and dates and the posting of the sheet to the proper pocket in the workcenter.

The student has mastered the shell game of papers and pockets, the first of the games in town that he needs to master if he is going to stay organized. Let’s see what people that have used the tool kit are saying.

#### •What People are Saying About the Workcenter™ Organizer Teacher excerpts

Jim McDaniel, Teacher and Head of the Upper School, Fay School

The Workcenter Organizer, as it exists at Fay School, is the most effective teacher of organizational/study skills which I have seen in my twenty-plus years of working with middle school children in school settings. Having spent a major portion of my educational career at Columbia Teachers’ College studying the use of metacognition in remediation of learning and reading processes, I have found that this system most effectively develops this self-awareness in students. By teaching students to think about how they learn, organize and perform most comfortably and effectively, students will learn those conditions or strategies that produce the highest yield possible for them in the most efficient time frame.

The Workcenter Organizer, with its well-designed set of pockets and folders, allows students to maximize their output (performance), because it enables them to most effectively capture, store and retrieve essential curricular input. Through uniform adoption of the Workcenter Organizer, not only has the importance of organization and workflow been naturally brought to the top of the school’s cultural agenda in the minds of the students and parents, but it also receives the attention of the faculty as they work to more consistently interact with students across the different disciplines in our grades six and seven.

Teachers daily reinforce the process of capturing, storing and retrieving information using a common lexicon, which is the result of this uniform, color-coded binder system. For example, when a teacher asks her students to take out his/her notes section to take class notes, the actual mental/visual image provoked with this command is common for each student. If, in

fact, a member of the class should happen to incorrectly transmit or misunderstand the oral command, the visual cues are present in the room to guide the student to proceed smoothly and independently with the class (i.e., a student can look left or right to see exactly where each of the members of his/her class is in their Organizer, such as in a red tri-pocket).

The positive effect of this subtle, but powerful feature on classroom management and student academic independence is not to be underestimated. When a student is able to comfortably manage workflow, successful academic results occur. Not only is that student's productivity higher due to his/her learned organizational effectiveness, but the student gains confidence in his/her own ability to perform such academic tasks.

Faculty using these Organizers are naturally reinforcing lessons in organization while they consciously inculcate in their students their planned, discipline-related curriculum. The teachers may use the Organizer as a framework for their presentation of material, providing a consistent, logical study tool for the students. The shared medium of the Organizer makes the transmission between the two parties clearer, more efficient and more effective than in educational settings where teacher and students do not share such a common vision of integral work tools and processes within a classroom.

The teacher who has the luxury of teaching a classroom full of students with common Workcenter Organizers has the benefit of clear and effective communication around the issues of note-taking, paper filing, and homework retrieval. Significantly, both teacher and student are able to focus more clearly on the content of each lesson. In addition, with consistent teacher reinforcement, students begin to understand that there is a direct relationship between being organized and experiencing academic success. The depth of this learning experience is enhanced if the teacher uses either effort or academic grades as a reward for proper use of the Organizer. Students then more readily internalize this important relationship between process and outcome in relation to their individual academic success.

The power of guiding students in becoming organized, independent learners influences not just the students as individuals, but the entire school. Community self-awareness and pride around excellence are stimulated, providing a positive academic peer culture. When pride and excellence are valued by both the adults and students in schools, many successes occur because they are the results of what a liberated, supported student will do for him/herself in an environment which fosters individual responsibility and academic excellence in its community members.

At Fay School, the Workcenter Organizer is an essential component of our strong, positive peer culture which motivates our students to perform at their top level each day. In short, academic success is valued by our students. The Workcenter Organizer helps our students realize this success, providing a road map which allows them to most efficiently and effectively reach their personal educational goals. For the "organizationally challenged" student, it is used religiously. For the confident navigator, it serves as a general guide which may be more directional and strategic in nature. In either instance, our travelers are learning enough about themselves, their strengths and weaknesses to understand that if, in fact, they do lose their way, they will have learned to stop and check their own progress at the nearest service station, a.k.a., the Workcenter Organizer.

•What People are Saying About the Workcenter™ Organizer  
Parent excerpts

Nancy MacNeil, Fay School---son Ryan MacNeil, sixth grade

“When you first look at it, it at least puts everything in one place. So when a child needs to begin their studying, they have it all together. Number one, that saves time. Number two, it gives the child a place to start. They can open it, they can look through, they know where to dive in. If they begin to feel like they don’t know what to do next, it’s jumping right out at them. So, as far as being an organizational tool, it gives the child a means of beginning. Sometimes that’s what they need to get started.

When Ryan needs to begin studying for a test, he can open the notebook to that area. In that area he finds his notes, his homework assignments, and all of his review sheets. There isn’t any “go take a piece of this, go take a piece of that.” I think I would describe it as a beginning. Fay School uses the notebook on a daily basis, so there’s continuity to it. Everything that Ryan needs to work with is right there. We don’t need to go find a slip of paper that might have been slipped into a book. We don’t need to go find an assignment that might have been put on a different slip of paper and stuffed in a different book. Again, that saves time.

It has helped my son as far as looking ahead and not feeling overwhelmed. Sometimes a child comes home from school and realizes, “Oh no. I have homework in history and I have homework in reading and I have homework in math.” Just those thoughts can be overwhelming. But if he opens up his Workcenter Organizer and sees, “Oh, well. That’ll only take me a 1/2 hour and then that’s done,” then that’s a feather in his cap and he moves on. All those kinds of things build in a child, the whole idea of “I can do this, I can succeed and I’m doing this on my own.”

I like the color coding. I like the assignment sheet being color-coded with the cocoon. There is never any confusion about which subject we’re moving onto next. The Workcenter Organizer has order. When you open the workbook, that’s the order we attack things in the evening. In other words, the green subject gets done first. When that’s done, the red subject gets done next. I like the whole idea because it connects one end of the workbook to the other end of the workbook.

I can’t say enough about it. Ryan, being a new student at Fay, has expectations being raised from where he has come from. The Workcenter Organizer has been a confidence builder. There’s been a lot less hackling—”You lost this, can we call someone.” He’s really learning, so when the workbook is finally taken away, the skills that he’s learned will remain.

There are some children who are naturally organized. There are some adults who are naturally organized. There are other children who are not going to be as organized, but given the tool to work with, they will learn that skill. I think that’s a skill that’s going to carry through a long, long time in their life.”

#### •What People are Saying About the Workcenter™ Organizer

Selected quotations from interviews

“ There’s everything in it’s place and a place for everything”                      Teacher

“it’s a tool that helps students achieve the illusive goal of organization...leading to increased self-esteem and workflow, as well as an increase in productivity.” Head of school

“It has helped my son...looking ahead and not feeling overwhelmed.”                      Parent

“The Workcenter Organizer has been a confidence builder.”                      Parent

“My points in school[have gotten]higher because I always have my homework” Student

“Everything [the student] needs is right there. We don’t need to go look for a slip of

paper...slipped into a book. We don't need to go find an assignment....on a different slip of paper and stuffed in a different book;...that saves time.” Parent

“There isn't that time lost in class trying to find something [or the] time lost at home trying to start an assignment.” Head of school

“[The student] is really learning the skill of keeping and finding things himself,...skills that...will remain...There are some children who are naturally organized...there are other children who are not going to be as organized, but given the tool kit to work with, they will learn that skill.I think that's a skill that's going to carry through a long,long time in their life.”

Parent

“...it's provided them with a very logical and consistent [framework] across the disciplines, in that each packet is color coded and...set up like the others...[Workcenter Organizer] provides a format for the learning of organizational skills...” Teacher

“...kids are finding it easier to keep track of their assignments and any other ...material”

Teacher

“...[the Workcenter Organizer gives] parents, teachers, and students a real opportunity to “trouble shoot” organization...Although they're not consciously thinking about the process of organizing...they're doing it.” Teacher

“It's really helped me and it's a great book.” Student

“...the role that a school can play in facilitating the application of this Workbook is to pull the pieces together. The Workcenter in isolation is an effective tool for students, allowing them to focus on work flow and organization,...The school can pull together the parents, the students, and the faculty in a way that makes for a ...powerful and effective use of the book.”

Head of school

•What People are Saying About the Workcenter™ Organizer  
Letter samples from children and parents

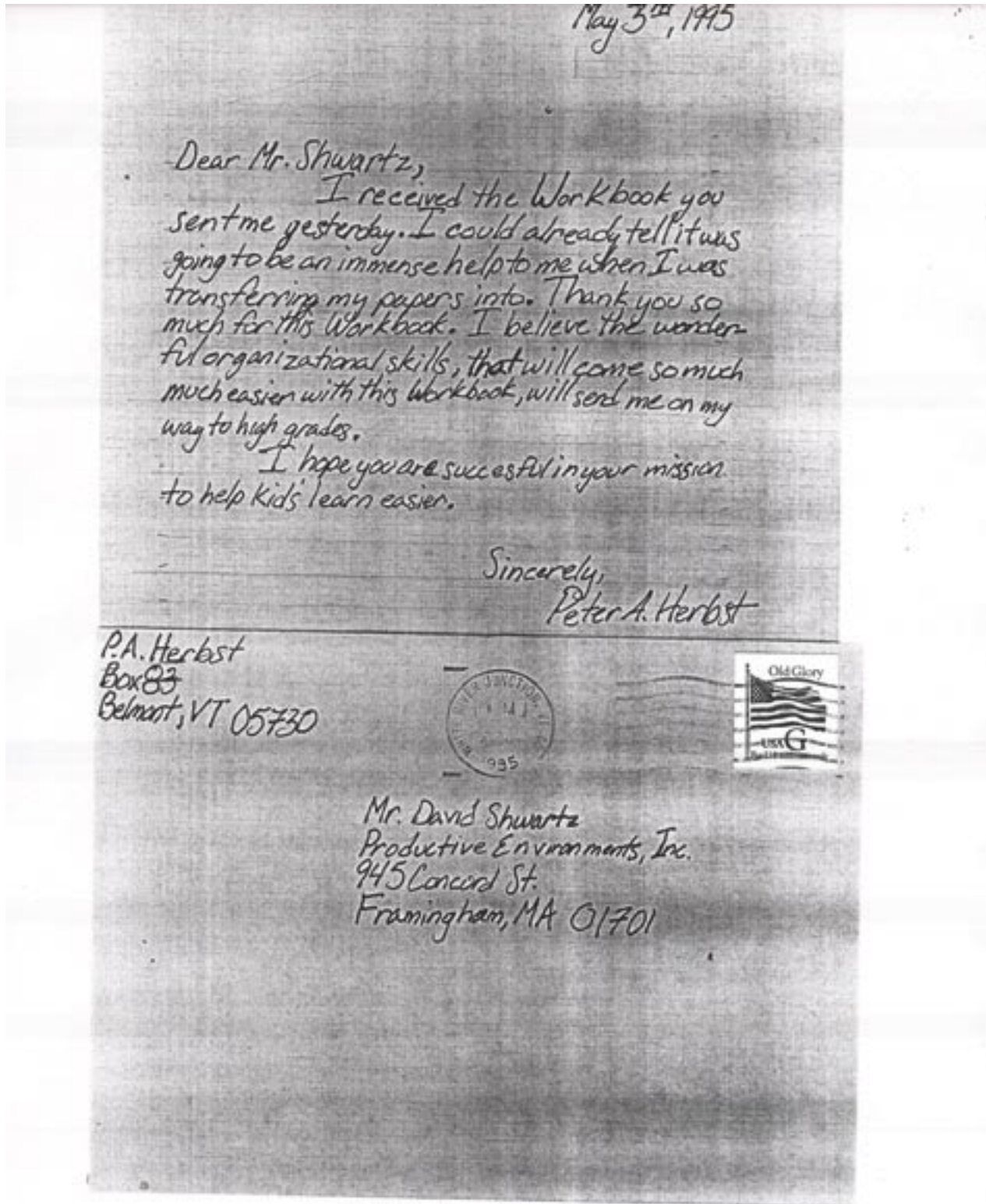


Fig.7 Letter Sample-Child

Dear David & Sharon,

The Hyperflo Workbook Organizer is great! My daughter loves it! Surprisingly Christine, our 15yr old, after watching the video was more tuned into and motivated to apply its various uses. I think because she's had more experiences in

keeping school work in some self-developed order. Teachers have questioned her on this different looking device & how it works so it keeps on opening people's eyes to a "new way." Many thanks for letting us in on this strategy for learning. © P&A Made in USA  
Sincerely,  
Ann & Bill

Teuber

40 Fairview Blvd.  
Weston, MA 02458



David Schwartz  
21 1/2 ...  
No.

South High, MA.

01772

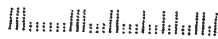


Fig. 8 Letter Sample / Parent

## Part 4—Operational Considerations

### • Getting Started-The Rubber Meets the Road

But we already have a solution

Invariably, the first time a new idea is presented as a solution to a problem, the reaction is “that won’t work.” Continuing to promote the new idea in an effort to get it pressed into service often results in postponement on the basis that “it might work, but priorities don’t permit immediate support.” In the end, a really useful idea is recognized as something worth doing, and once enculturated, is recognized by most as, “yeah, that’s the way we do it. We’ve always done it that way.”

Only great ideas achieve this kind of lasting recognition. The good news is that we are dealing with a “technology,” not unlike the computer, that can be quickly and readily adopted once properly configured and delivered. This leads to very rapid enculturation and an immediate change in our “cultural inheritance.” The obligation this puts back on the marketplace is simply that each person needs to take a baby-step forward to apply these ideas in their day-to-day lives, if only for the sake of the children.

Often, when an idea represents a “paradigm shift” in the way things are done, this process can take tens of years. We have seen the battlelines drawn in the methods for teaching reading and math, and years later, agreement reached “for the most part” on how to proceed. I believe the new battle line now needs to be drawn in the application of organizing, and we need to find a methodology we can all agree on that allows us to enable this skill to be learned in the most fun and painless way. This doesn’t have to take tens of years either, and bitter disputes don’t have to characterize the process.

It is pretty clear that what we have now is a grab bag of “ways and means” to deal with this opportunity. And there isn’t a lot of coherence to the package. In a recent discussion I had with a sixth grader in a local school, I was struck by the way she was handling her papers. I asked her to show me how she handled her handouts and her homework papers. She took out a wire notebook which was bulging and somewhat rag tag and pointed to the handouts that were stapled in line, mixed between pages of class notes. Then she showed me her homework, which was done on pages of the spiral, interspersed with the handouts and class notes. She indicated that the teacher did not require homework be handed in, but came around and checked it at the desk.

It is clear that this method has some serious consequences and limitations. It’s easy to see how a page could go missing if a stapler were not around. Worse yet is the scenario of the child that was out of class for any period, unable to keep things in the “right order”. It’s also easy to see how the child that has the wrong book can start to mix math work into the history notebook, just for a piece of paper to write on. Probably of most concern is the fact that this child was using a journaling skill that worked in 2nd grade and had learned nothing about handling papers by category. Reviewing for a test would certainly seem easier at first blush, but I venture to say this would indeed not be the case. Say you just wanted to review all your quizzes in a unit, or all your homeworks. This poor kid would look like a Maytag appliance in the wash/agitate cycle.

Without lumping all of the ineffective methods that are being used in one bin, my sense is that the majority of techniques are really being used as “crowd control” methods. Concern for what happens in the student’s zone is not material to the election of the method that is mandated. The organizational tasks associated with preparing and delivering documents are not a consideration. Just having the stuff in one place so the teacher is sure it was delivered is the overriding concern. The opportunity for intelligently organizing so the process is really useful and meaningful to the child is “ruled out” by the method employed or simply left to the student’s responsibility, with no guidance, unstated, and not taught.

- Practical Start Up Considerations

What's out there,  
and how can Workcenter Organizer fit in?

Resistance to change is the main force that undermines the deployment of new tools. Very often, if there is a “way” to organize, it is likely the teacher’s way, or the parents’ way, and more often than not it is really structured to serve the teacher’s goals first. This is not only understandable, it is reasonable. A teacher has a large constituency to deal with and needs to establish some consistency in how to observe and monitor the progress of that constituency.

Clearly, in absence of clear procedures, chaos would reign. The question is, are the methods being employed to teach organizing an exercise in “crowd control” or are they geared to work for both the student and the teacher? Do they really help the student to deal with complexity and become independently effective?

Let’s take a look at some existing methods of organizing and see how the work center units can be employed.

#### School-Provided Homework Planners

In the case where a uniform and separate school calendar and assignment sheet book is provided, the Workcenter Organizer is naturally complementary. The school provided homework planner is a powerful tool that works to ensure that curriculum is scheduled out and that the delivery windows are clearly identified for all to follow. Since these are often document sized, and are often prepared by duplication on standard-sized typing paper, they can be hole punched and carried in a single binder, making them easy to find and reference, another added advantage.

I think it is fair to say that the Workcenter approach is fully complementary to this kind of school-designed and school-provided book. This type of approach has some of the same limitations of the student organizer in that the homeworks are separated from the homework documents themselves. Additionally, if the assignment book is structured the way most typically are, they are formatted on a timeline of some kind, and so the homeworks are, in fact, mixed by subject, which makes it very difficult to archive a subject-by-subject list to keep with the actual homeworks that the student will store for later reference.

What I recommend is that the student use the copymaster forms provided with the WorkCenter and copy the assignment onto the homework table for that subject and onto the weekly plan table for the two-week interval. This way the student can schedule the work in bite-sized chunks. The delivery is laid out by the teacher but does not become the sole basis for transaction handling by the student. The Workcenter becomes a powerful representation system for the contextual collection of work. The contents of the portfolio are continually updated and kept together, including list information about the documents. Since the work detail is collected in one central place on a subject-by-subject basis in such a way that the work detail lives “together” longitudinally, the context folio gains increasing value long after the short-term transaction value of the delivered work is completed.

#### Student Organizers

On a more tactical note, many schools employ student organizers that are list-oriented books. They can be recognized by their smaller size, and contain a calendar, forms for collecting homework, and a telephone directory. These products are handy to retrieve and to make task notes in. They are small and portable and are a central location for all activities. Sometimes these

are formatted and printed by the school in standard 8-1/2 x 11" document size so they can be used in a binder. These specially sized "organizers" should be used with the Workcenter Organizer pocket system, where the Workcenter Organizer pockets are used to manage the full sized, 8 1/2 x 11, documents which are the knowledge contents part of the work flow.

Based on our experience, I see these products as being geared toward older children. Younger kids are not inclined to make lists as a way to organize. Often, they are better off if they can intelligently gather documents together, rather than having lists and documents in separate locations or books. For younger children, using an all-in-one approach, where the required subjects are all in one binder and the lists of information integrated with the documents, leads to a simpler and easier-to-manage system.

As a child develops stronger organizing skills, going to a modular approach—with separate units for subjects and portable list-oriented calendar organizers—could be gainfully introduced. The purpose of the copymaster forms, provided as Workcenter Organizer components, are intended to provide a way to capture "organizer data," i.e., data about the documents, right alongside the documents they are about. This is particularly important in archiving, when a portfolio is stored for later reference. Here, the list of homework in that subject can become the separator page in the portfolio, for example, and stay with the homework as a checklist. Probably more important, this approach is substantially more economical, since the copymaster forms for homework, homework planning and important information may be photocopied by the user and applied over and over again at marginal additional expense.

### Portfolio Approach

Let's look at the portfolio approach as an example of a method that is already being practiced. It is being successfully employed in many school settings. The continuous collection of work output as a way to track the development of a child's skills in a particular area are invaluable for parent, student and teacher. The question is whether or not there is a way to transfer the understanding of and the responsibility for the portfolio to the child as the child reaches higher grade levels and progressively higher levels of development. Is there a way this can be done such that the richness of the portfolio includes information useful to the student, collected into contexts over time, that support the process of review and studying where testing and measurement in the end dictate success or lack thereof?

The principles of portfolio are inherent in the Workcenter Organizer. The work center pockets can be used to implement a classroom portfolio strategy in the earlier grade levels. Additionally, the work center structure and methods, once enculturated by the child, can be independently carried on as a functional working model of organizing, long after the portfolio method is abandoned as a "supported classroom methodology". In this way, the child can take over, and own responsibility for the critical steps of input/process/output.

The work center philosophy is strategically aligned with the portfolio approach and represents the future of the portfolio method of structured class room organizing, often the model used most heavily through grade 5.

- Other Considerations in Using Workcenter Organizer  
General notetaking, writing skills, and trappers

### General Notetaking

Let's discuss the binding method used for class notes and student-generated notes and the format of the paper on which the notes are taken. In many cases, a teacher will be adamant that the students use a spiral notebook. In other cases, the teacher will require that class notes be put directly on the rings of a three-ring binder by subject. There is good reason for both approaches,

the most important being that notes are stored chronologically and the notes are kept together in a format that allows them to be easily and quickly reviewed, one at a time, without having to remove them from a pocket for viewing. The WorkCenter approach is perfectly compatible with this notetaking method. Clearly, notes which are captured on the pop pad note-taking device can be placed directly on the rings in each Workcenter cocoon.

In regard to the notetaking format, we recommend that you consider using the new approach that is embodied in Notepaper™ 2000. Rather than just taking linear notes, Notepaper 2000™ provides two forms of cross-referencing. The first allows the student notetaker to enter symbolic codes in the left margin to highlight important categories of material. The margin on the right provides for hyperlink cross-referencing. In this way, related matter can be quickly noted and retraced later when the contextual reference is “cold.”

### Writing and Composition

In many cases, the document preparation process that is taught is stapling the most recent revision of the document to the last revision, and handing this in for grading. This clearly works and meets the teachers need to see progress. Let’s see how we might integrate the work center approach into this application. The use of the context folio approach is perfectly suited for this job. The objective here is to treat the writing process as a document organizing task. For this application, I suggest that the innermost pocket be labeled for supportive matter created by the student prior to the actual generation of a written sample such as preparatory notes, outlines and character diagrams. I propose designating the middle pocket for the collection of draft documents. To complete the context folio, label the outermost front pocket as work due and use it to hold the best and final document for grading.

This approach is useful to the student in preparing for a test, since the preparatory notes serve to reinforce the matter finally presented as a finished document. The advantage of the context folio, as always, is that through progressive completions, the teacher or parent is able to observe any barriers the student might encounter in reaching the final goal. In this sense, the process is as much the product as the “final product” itself.

It’s helpful to teach the child to staple the last version of a document to the new version of that document. This is an easy and effective method. This practice is easily incorporated into the new practice of document centered organizing as depicted above. Not only is the instructor’s concern for dealing with the comparison of documents and the issuance of a grade on the last version met, but the students needs are also met. So the standard method “taught” need only be augmented by using the stapled revision as the “best last draft” or the “work due” and we have an integrated organizing model for handling the documents. Not only does this method allow the student to follow the standard rules, but it also supports the organizing angle from the student’s point of view, the angle that really teaches the student to get a grip on the information handling process.

### “Trapper Keeper’s™”

Dual portfolios, organized into a binder known as a trapper keeper, is a commonly used approach for document organizing. These portfolios have a pocket on each side. Although using one of these dual pockets for each subject is a good start, you will find that after a short period of time the pockets become disorganized piles of loose papers.

If you are particularly fond of the special images often found on the cover of the dual pockets you have, then you can simply replace the cocoon Subject Portfolio with the dual folio

and nest the tri pocket and book pocket inside. Use the label sheet and forms to implement a personalized work center system.

In the preferred approach, the Subject Portfolio and its complete contents, the Workcenter Organizer, is a replacement for plain vanilla dual pockets. The advantage of the Subject Portfolio, with its slotted holes, is that it will fit in any three ring binder from 5/8" to 2" and still open and lie flat, allowing for more functional nesting of the tri and book pockets. Each Subject Portfolio "cocoon" can be fully opened and the pockets and contents easily removed. If necessary, the rings of the binder can also be opened. This improves the output task associated with archiving, making it really easy and fun to do. If it's not fun, it won't get done.

The workcenter works because it offers a sensible format, "up front", on day one. The structure makes it easy to quickly place and keep documents in the binder. Documents can be placed instantly, without opening and closing rings, and without having to label each document the moment it is received. In this way, each document migrates to the right place, and the child feels that they have control over the "pile". In the work center, the pile becomes a "smart pile".

Using the work center approach, each document has a specific place for incremental filing, prior to being archived. The documents are kept according to the pre-labeled pocket files, and document filing is done each day, upon receipt. In this way, piles do not become unruly.

During scheduled archiving time, there is no pressure to just shut the binder and move onto a different activity. This makes it easier to do the additional separating, categorizing, and labeling of the actual documents prior to storage. The inability to separate documents kept in "single piling pockets" results in rapid break down of solutions that rely on just dual ports. The papers are either stuffed into a "single level" pocket, or worse yet, they are stuffed into a book bag, because the dual pocket is simply too full. "At the end of the day", a single pocket used as a bucket for every paper received simply doesn't work. The process using single pockets can be characterized as "flinging" instead of filing. Paper handling occurs without mind to document category or document type. Workcenter Organizer pockets are the power tool upgrade for the stuff you keep inside of "trapper binders".

- Great Mentors

The identity crisis: who caught the fish?

There is more to a successful organizer than meets the eye. In the best of all worlds, the student of organizing will have a great mentor. The role of the mentor can play a central part in securing a positive self-esteem experience for the child as a good organizer. It is highly desirable to establish a special working relationship between the novice and a teacher, sibling, relative, or parent. The good news is that in much the same way that mentoring occurs in the teaching of sports, active mentoring for organizing is really possible with the tool kit. What I would like to do here is share a brief fantasy story to portray what I consider to be the "ideal" sort of mentoring relationship and to pick out some of the characteristics of this mentoring example that are particularly valuable and are worthy of emulating in our application.

In our tale, it's time to go fishing. Let's look in on Frank, who is about to teach the basics to his son, Frankie Jr. It's mid-May on Buzzards Bay and the striped bass are running. Frank made sure that for his son's fifth birthday he found an appropriate reel and rod. Frankie was excited to get the fishing gear and was anxious to use it. Frankie had a good idea of what to do, having seen adults fishing at the dock and on TV.

Saturday morning finally arrived. Frank took Frankie to the local bait shop where his friend John reeled some new line and outfitted them with the right lures and some live bait. Frank wanted to make sure this trip was a success and had timed their arrival at his favorite fishing spot for the incoming tide. The spot was a stone jetty on the mouth of a tidal cove that opened to the southeast portion of the ocean.

Deciding to use the live bait first, knowing this would be easier for his son, Frank hooked a small poggie on the line. He knew that letting the bait serve as the weight to float the hook in the current would be easier than instructing Frankie to continuously cast and reel in a lure. In any case, Frankie understood the idea of catching a fish with another fish, and the lure seemed out of place. Without thinking, Frank took Frankie near to him. The fishing pole was in Frankie's hands but the reel was in Frank's grip. Flipping the bait while waving the pole overhead, with a snap of his wrists Frank had the line fly out a good distance into the deep blue water. Three reel-ins and one cast later and Frankie had a strike. Frank moved in while explaining the next maneuver. He jerked the pole toward them, both father and son holding on for the moment. Then just as suddenly, Frank stood back and with words of encouragement and guidance led Frankie to reel in his catch.

The moment is ripe for Norman Rockwell to record for the personal enjoyment of every father and son. The point is that this is a classic case of modeling by example. Frankie knew he had a similar tool of the trade as his dad. Dad was the expert and he instructed Frankie. Frankie was performing on a level he had observed by other adults and was successful in his first attempt to bring home the filet. But who caught the fish?

If you ask Frank, Frank would say Frankie caught the fish. But, Frank had arranged a complex set of variables and "plugged them" to make sure this equation balanced for his son. He would no doubt feel that he had experienced the catch through Frankie, given all he had done to set up for the success. If you ask Frankie, he would blurt out "I did" without hesitation.

As the day progressed, the two tried different bait, different lures and different locations. Frankie saw his dad succeed through additional trial and error as they brought home three fish for dinner.

The new initiate, Frankie, was not separated from the experienced user, his father. He saw the "expert" learning, as he himself imprinted on the behavior of his dad. Clearly, Frankie, realizing he was a novice, felt the responsibility for upgrading his skills in order to achieve higher levels of performance. Fact is, Frankie was an active participant in the process as an active learner who was excited to take personal responsibility for his own development.

The sense of comfort went deeper as Frankie personally appropriated the domain on more than the action level. Frankie made it his own by not only getting comfortable with the kind of process it was, but also by naming each of the tools he employed to "execute," including giving a name to his fishing pole.

We have learned from experts like Jean Piaget that for true adaptive learning to take place, the body needs to be "in synch" with the environment and the successful development of a skill set begins on "day one" with the child extracting knowledge instantly and setting up his or her own building blocks for higher learning.

As Frankie watched the trial and error process lead to new successes, he began to reflect on his actual experience, trial and error, and his exposure to new behaviors. This is critical for true adaptive learning to take root. The child absorbs the new into the old, the use of the lure in place of the bait, and then constructs new knowledge in the process of actively working the project.

Clearly, if the tools have the right structure, they can greatly enhance the child's desire to confront the challenges of representation and action in an effort to succeed at the task in ways that truly optimize their conceptual understanding, their potential, their creativity and, more importantly, the desire to do it for themselves.

Most important, the question of responsibility for learning and upgrading of skills is squarely on the shoulders of the novice. When this occurs, it leads to the greatest end result for the new initiate, the independent learner.

The key is to give the novice a chance to succeed by providing a good environment and a good tool set that is matched to the child's developmental level and to provide the tools for success. In addition, on an intuitive level, the child needs to know who is going to be the beneficiary of the effort.

In much the same way as in athletic games, if the teaching tool the parent uses is the same as the one the child uses, the child can be an active learner. We need to recreate this basic setting if we are going to effectively imbue organizing skills in our kids. If we are going to teach organizing like we teach football, we are going to need to use the tools the child applies in the domain, and have the domain be more similar than different, adult realm to child realm, so the child sees the project as a valid collaboration not as a fictional experience. In the ideal opportunistic collaboration, the novice has the opportunity to fail in a safe and exploratory setting. The underlying theme is to avoid debilitating frustration that could result in anger and reapproachment.

An important lesson is that the responsibility for opportunistic learning is indeed shared. The leader needs to set up the environment and provide tools which will allow for the right chemistry for learning. At the same time, it is extremely important that the tools be fun, sensible, and easy to use so as to permit a successful transfer of responsibility. The interaction needs to result in a sense of resolve that the success as well as the true responsibility is the child's. That's what we want to see happen every time.

Is this how you are teaching the process of organizing? I raise this question in the hope of encouraging consideration of what needs to be done to foster a high self-esteem experience in this specific activity. I put the question on the table to point out that there is a lot more that we need to do to set up a complete experience for the novice which involves this kind of adaptive learning in our chosen application. I would like to see mentors with the kind of style described above engaged in teaching our children how to organize. I encourage your evaluation of the tools you have at your disposal to teach organizing and compare them to the work center approach using some of the specific criteria pointed out above. Consider trying the work center approach, if for no other reason than to see if this kind of mentoring can work for you and your protege.

- Self-Assessment

Mirror, mirror on the wall,  
who is the fairest mentor of them all?

We have looked at the intrapersonal side of mentoring and identified some desirable features of the relationship. Now let's look at the interpersonal side of it. We are at the point in our story where we need to discuss the idea of practicing what we preach.

Ask yourself, in your last effort to teach a skill to a child, was the process child-centered to the extent that you picked a relevant and appropriate task in which you could acknowledge the child's theory, support it, try it, see it through to the end, and try it once more until successful? Did you do this even if it was obvious to you that it would fail to one degree or another in each successive effort?

This is simply very hard to do. Most situations don't lend themselves to fulfilling the role in its purest form. It is particularly difficult to score high as a great mentor in the organizing application, absent a "pliable" tool kit that is sufficiently robust so that it won't just break or "misfire" in some random way and result in confusion and lost opportunity.

The best way I can think of doing this is by characterizing an example which is "doomed" and see the kinds of things that can easily go wrong. As we have said, being a great mentor is easier said than done. I will tell another brief fantasy story to make my point.

We have probably all been down a path like this one. You are out and about with your

child and you encounter a challenging situation, a problem you clearly have to overcome to move forward. You see it as a great opportunity to teach a lesson in behavior and/or values to your child. This time you are going to do it by mentoring and you are going to allow your novice the chance to learn by exploration under your guidance.

It's an early winter morning. You have your 7-year-old at your knee, following you wherever you go. You find yourself down in the family room lighting the fireplace. Clearly, the lesson is in fire making and fire safety.

"How do you think we should get this fire going?" is your question.

"Put some big logs on the rack and stick one of the long wooden matches under one of them until it starts on fire," your child responds.

Do you proceed to do this or do you say "no, that won't work, let me show you what to do"?

This is an easy one to trial out, so you follow his instructions and put the logs on the rack. You reach for the damper and open it and a cold down draft is felt at your hands and feet. As you strike the match to light the log, the draft blows out the match. On each try, the match extinguishes before you can get it to the log. Now, where do you go from here? The child, sensing the cold wind and seeing his vision extinguished with each gust, then proposes, "Dad, let's move the chimney to the other side of the house where it's not so windy and try it again." The suggestion is offered in good faith. I think you see what must happen next, but the point has been made.

How resilient are you as an adult mentor. How interested are you in teaching versus showing. How often does an appropriate situation present itself where a worthwhile skill and value can be taught and you are really in a position to invest the time and effort to deliver the preferred process. Clearly, we would like to have lots of these opportunities and we would like to be remembered by our children as having been supportive catalysts. We might be surprised, however, to find a difference in the role we thought we played and the role our child recalls in these memorable teaching moments.

The best news about the Workcenter Organizer as an entrant into the "tools of the trade" for organizing is that the components offer both the adult and the child viable means to organize documents. The tools offer the child, in particular, an opportunity to be more like adults. At the same time, the adult can see document organizing from the child's point of view and become more child-like.

The tools offer the adults an opportunity to be more like their children by sharing a common domain of activity, having a common language and identical semantics about the objects, the environment and the tasks.

Even if it is just for a short while, the tool kit fits into this super-critical application and can result in your fulfilling the prophesy of being a really great mentor. It provides an opportunity to generate positive self-esteem in document organizing and, by osmosis, in learning to be a good learner. In the same way that you want your son or daughter to think of themselves as good at baseball or soccer, as in "I'm a great hitter" or "I'm a great goalie," you can help them to come away from an encounter in document handling and say, "I'm a great organizer".

By fostering a joint "professional relationship" between mentor and child, with the tool as an instrument of organizing, you can achieve the result hoped for. The child can come away from the experience as a disciple, with a role model, as a learner, an applier and a self-styled theorist. The child can become an activist willing to label his or her actions, allow you to bear witness to his or her successes and failures, all in the interest of shared growth. This can happen in organizing, it can happen with Workcenter Organizer tools and it can happen one on one between you and your novice. Looking into the mirror together, the mentor can see that "I can do this." The child can see a friend in the mirror and believe "we speak the same language, we share the same meaning, we're really communicating."

- Imprinting-Do We Really Need Mentors?

Playing every position, the best way to learn the game

One on one mentoring would be nice if we could get it every day. But we can't. If this was the only way we could hope to instill the important lessons needed to learn how to be organized, our task would be an uphill one. For one thing, in the one on one scenario, we would need to have lots of skilled trainers, caregivers without negative scripts. It will take lots of training to get enough mentors in organizing to achieve a true mass phenomenon. I hope this goal is sought after, but I realize that this will take time. Even so, the ratios are not as favorable as having a taught classroom situation.

The more typical scenario is one teacher and a one to many relationship. Inspirational leadership is very powerful and can lead to high levels of motivation. Yet, in the case of led groups, we are limited as well. Even though an inspirational teacher can work wonders, for many students, the impact is diluted.

For the good to average class of kids, there is usually a need to bring along one or more students that are simply not able to keep up. The conventional method for instilling motivation in groups where this situation arises typically revolves around defining roles for needy individuals where the role reinforces the responsibility that the needy child has. This is usually done by providing opportunities for the selected student to directly contribute in helpful ways that can be recognized by both peer and adult. As an example, if a particular student was having trouble archiving, the deficient student would be singled out and made "archive monitor" for the class with responsibility for checking the incremental filing of other members of the class.

Although this approach is generally applicable and exceedingly useful across a broad spectrum of teaching opportunities, it is most often directed at children that are alienated from others and whose behavior is "out of bounds." Since this "role-driven bootstrap technique" singles out an individual, this form of independent contributor role-driven model offers fewer slots for participatory activities in relation to the larger group.

If the goal is to have a true mass market phenomenon in "getting organized", one can see that using this approach would also have inherent limitations. The ratios just don't work.

Yes, we really need mentors and inspirational leaders, early and often. And, yet, there is something more powerful that can happen with the work center approach that will result in the mass phenomenon we are hoping to achieve, and that is imprinting.

The Workcenter Organizer system for teaching document handling holds promise to enable teaching by peer influence, an approach that has much greater leverage. I contend that most kids that play baseball learned the majority of techniques and rules from their peers in "playing on the street". It is no surprise that so many of us understand the sport and know how to play it. It's no surprise that it is our "national pastime". Imprinting is at work. I believe, the same process can play an equally large role in making "organizing" the national past time of our children.

As we have explained, the tools are transparent and so the roles involved in becoming skilled are easily apparent. By observing the behavior of a successful peer, the best practices can be "copied" with no risk. This is not a test situation but instead a process driven partnership. Since the tool kit naturally brings the "right roles" to the conscious minds of our novice organizers, each child is better able to assimilate the associated behaviors and re-use the associated functional actions in their on-going pursuits.

The situation is more like the case where the child is playing on a ball team, and is playing every position simultaneously. The roles or actions each student must perform to be

successful are input/capture and categorization, process/consideration, creation, output/communication and caching (archiving). Each of these roles is experienced or played out by each individual learner using the pieces of the tool kit. Each step in the process is immediate, clear, and mechanically distinct.

In this way, every one of the novice organizers has a chance to experience the full circle of how the system really works. By “batting the cycle” the protege has the benefit of incremental, step by step successes in “effective organizing behavior”.

The tool kit ensures that this is possible. The extent to which the process driven partnership among class mates can be set up to be risk-free and supportive will further contribute to the overall success of the effort.

The basic goal in using the tool kit is to assist each child in finding his or her own inner-self and the mind-body machinery that allows them to be good at the application of organizing. All kids, no matter what their socioeconomic position, need to be provided with the tools that enable these roles to come into play, “fire” independently, and aggregate at a rate that is driven by each child in their own way. Let’s see how this might actually work.

In this scenario, other than the day the tools are delivered, there is no mentor. There is no one to look over the shoulder of the child and provide supportive guidance. Picture the group of Workcenter Organizer users where a particular student is having difficulty in archiving his context folios. In this scenario, a more exciting possibility emerges, what we can call “peer mentoring”. If there is a student that is archiving successfully, the poor achiever can hook up with this student and imprint(copy) that students behavior.

Consider archiving, one of the most important lessons the Workcenter approach can teach. Since archiving is one of the behaviors everyone initially has difficulty with, a few of the better students might have to spend time sharing their methods. In the end, the overall skill level of the class would increase more rapidly. The method of peer imprinting allows all skills to develop, and so everyone gets to “hit the archiving triple”. In the case of the other roles, since the activities are each very clear cut, another one of the “expert” students might take on the mentoring role briefly. The overall effect would look like a jazz performance rather than an orchestral practice session.

For the teacher, greatly outnumbered by students, this holds incredible promise. The environment in which the teacher needs to be involved now only requires short intercessions, and only when an obvious problem is a foot. Therefore, the opportunity cost of not using this approach to developing a class room of effective organizers is dramatically amplified.

For fun think of this situation as one that takes on the following characteristics: Picture a large field filled with little kids playing with blocks for the first time, each seated in an open space adjacent to one another, where each has just enough of their own workspace to build. The teacher provides each kid with a set of blocks. The child is given “play time” with the only goal being to discover fun ways to build. The properties of gravity, mass and balanced structural combinations are discovered by each child on their own. They’re allowed to interact with the kids directly next to them and they are encouraged to use any ideas they see that are “better than their own”.

Then, the teacher has only casual interaction with the kids in her zone, interceding after some predetermined period of time and only when the height of the skyline in a particular child’s workspace is lagging substantially those of the surrounding kids.

This is the way the work center approach can work on day one. We are making an important statement about the tool kit and it’s ability to accomplish this objective. That is, like blocks, the tool kit is exceptionally simple and fun to use. Key roles and behaviors are elicited without a “course in block-building”. The “building blocks” provided can be combined to build interesting and compelling structures, enough to keep the child interested in learning. Since the

work center tools are transparent, they allow the teacher to “see” a problem early and make the needed mid-course correction to help the weaker child along the way.

The point here is that we need to provide tools like the Workcenter Organizer that can stimulate individual development by peer imprinting in what is naturally a mentor deficient environment. Since the tools naturally lead to self-discovery, peer leaders will naturally emerge, rise to the occasion, and share their skills. Since the tools are truly self-explanatory and self-teaching, quick studies will follow peer leader footsteps. In this way, a much larger, mass result is entirely possible.

## APPENDICE

Appendix A-  
Detailed Description Folio Workcenter Organize

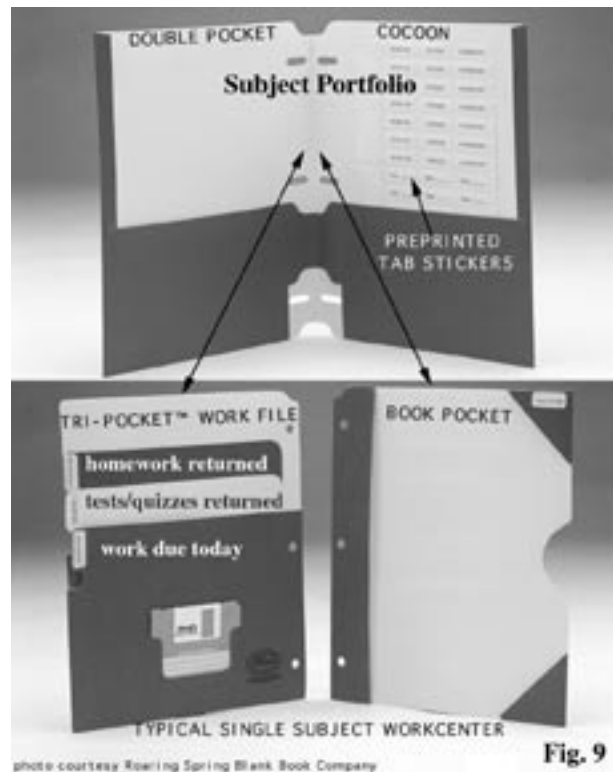
- Folio Workcenter Organizer

One workcenter design for each subject, all in one place

As you can see in Fig. 9, a workcenter is structured as a nested set of pockets. The outer pocket, referred to as the Subject Portfolio, is a patented, dual pocket “cocoon” with slotted holes which uniquely allow it to open and lay flat. The slots permit the rings to be opened as well so things can be put onto the rings inside and taken off the rings from within the cocoon. The front pocket is labeled “hot sheets” to hold hot or priority sheets for this subject. The rear pocket is labeled “reference sheets” to hold reference sheets for this subject.

The first pocket inside the cocoon is what we call the tri-pocket master divider or index. It is a work file. It has temporary storage locations for your “work due that day” as well as for your “homework returned” and your tests and quizzes returned.”

A document pocket is next in line to keep topical notes or for storing handouts on this unit. Since these pockets are labeled in accordance with the typical process flow of documents, the format is universally applicable for each subject. Class notes and personally generated notes can be placed into a book pocket or can be placed directly on the rings following the tri-pocket master divider.



The workcenter for a single subject has multiple parts designed to help with each of the 6 Cs. Each subject has a workcenter labeled for each type of document you handle. The paper types “define the categorization” and are used to create the label scheme. This scheme is provided as the preprinted tab stickers. There are homework documents you generate in response to an assignment which are “work due” the day you have to hand them in, and “homework returned” when you get them back. Tests and quizzes will result in the creation of completed and corrected test and quiz documents, which can be referred to as “tests and quizzes returned.” Reports can be stored in the homework pocket

You will often be given guide sheets which describe project details and deadlines, such as rules and dates for a science fair project. We can refer to these kinds of documents as “hot sheets.” There also will be reference papers which you will need to use over time, such as the teacher’s grading

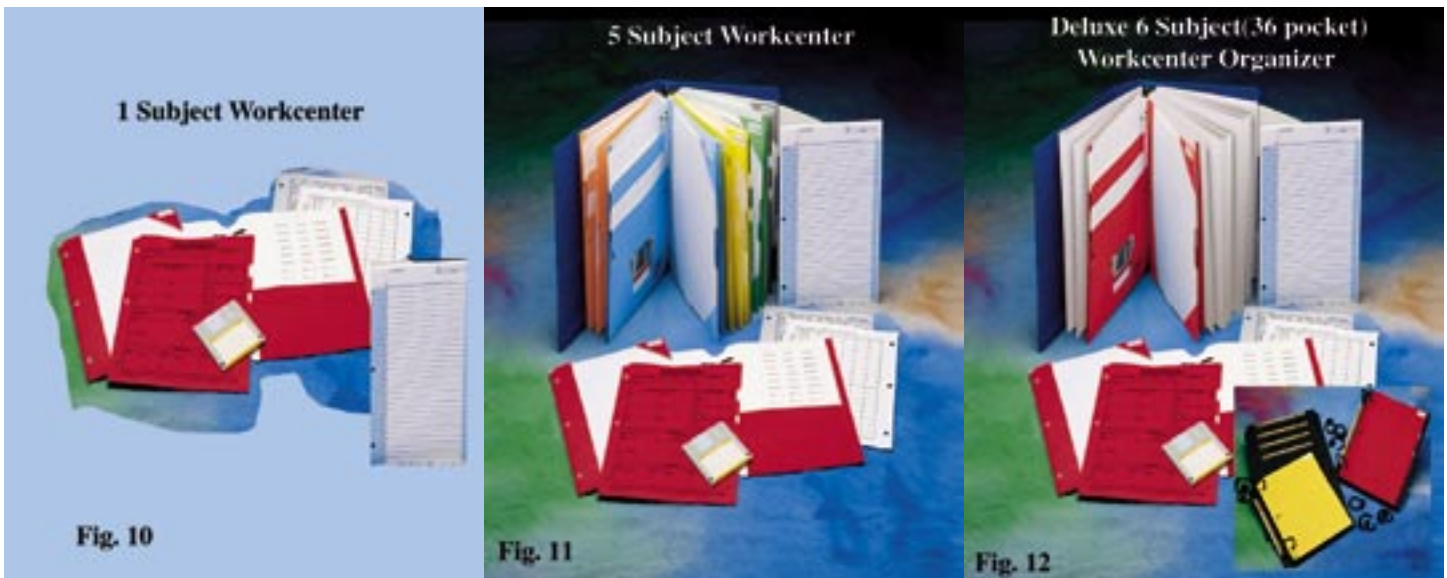
policies. We can call these kinds of papers “reference sheets.”

Often, there will be documents which are provided to you in the form of handouts that convey specific information about the subject matter being covered. These can be put into the book pocket or can be hole punched and put on the rings with your class notes. Of course, there are class notes you take directly on a day-to-day basis. In addition, there are lists of information you will want to create and track which relate to other aspects of the subject such as your goals, plans, resources, classmates and team members, key event dates, due dates and the like. A workcenter is designed to handle each of these kinds of paper.

The day-to-day use of a workcenter involves the movement of papers individually and in groups, organized by the way they are captured, the way they are used in class, the way they are studied, and the way they are stored for later reference. The workcenter pockets keep your current or “mission critical” context folios for each subject. The papers you have in each of your cocoons reflect only that information you will need to know at the present time for that subject.

The path of any piece of paper through the workbook follows the steps of input, process and output. The determination of which step to take is left up to the student and is self-evident in each instance. The determination is made on a document level. Since the general “process” in each subject is similar, the format of the workcenter for each subject is similar. This fact allows us to build an all-in-one kit as a group of individually configured workcenters. In order to have a place for everything and in order to enable you to put everything in its place, the structure of a single subject workcenter is simply replicated.

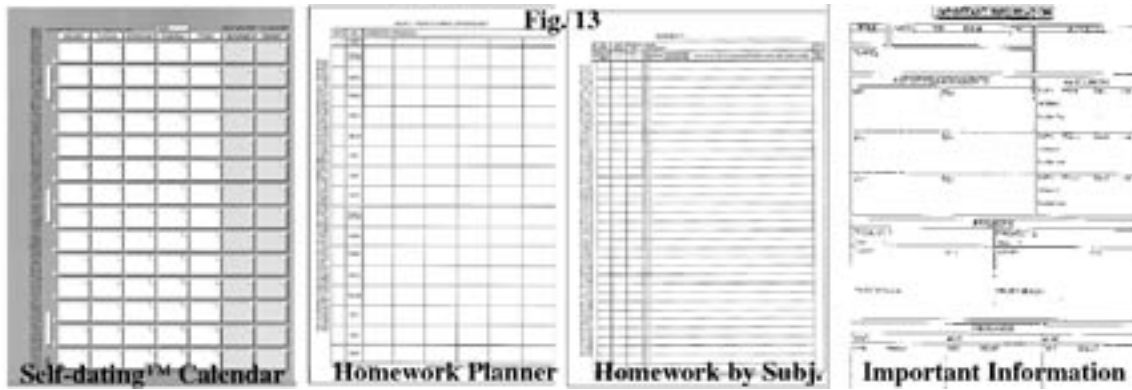
The full featured work center based tool kits are provided in three different configurations. There is a basic one subject workcenter, Fig. 10, which comprises the cocoon dual folio pocket, a tri-pocket and a document pocket. It also includes the copymaster forms and PopPad. There is a 5 subject version, Fig. 11, which includes 5 workcenters, the forms, and a pop-pad. Then, there is a deluxe workcenter kit, Fig. 12, that provides 6 workcenters (36 pockets in total), a pop pad with notepaper 2000, all of the copymaster forms, and a set of 6 archival binders. These configurations are shown below:



Workcenters provide means to manage documents day-to-day, week-to-week, and month-to-month

- Tools of the Trade—Record Keeping Accessories  
CopyMaster™ Forms and Windowpage® notetaking

The workcenter is complemented by a set of planning forms, shown in Fig. 13. There are copymaster™ forms that assist you with record-keeping, offering the advantage that they are full-sized sheets of paper you can copy and use as often as necessary. Each sheet has a different purpose. The self-dating calendar assists you in creating an event map for the tracking of important tasks and commitments. The homework table is designed to help you capture homework assignments separated for each subject. The homework planner table is designed to assist you in laying out the various assignments in accordance with a blocked schedule for the week. The important information table assists you in capturing topical information and resource information for the unit you are studying. Pictures of each of these forms are shown below.



A preprinted

label sheet, Fig. 14, is provided to enable basic labeling of all of the tri-pocket organizers. It also features self tabbing labels for marking paper groups. To round out the complement of tools that are part of the Workcenter Organizer kit, is a pop out notepad or Pop Pad™, Fig. 15, that allows you to place the pad in a range of locations to make notetaking quick, easy and fun. The pad of paper uses a formatted note page that encourages labeling of your notes and cross-indexing of related reference materials. The label sheet and the pop pad device are pictured below.



Fig. 15

Each workcenter is designed to make it easy to separate and file your papers incrementally, so that you will always know where to find a piece of paper on demand. When you are asked to produce a document, you simply have to reach into the workcenter or its supporting archive and it's there. You never have to worry about losing an important piece of work again. The workcenters provide a dynamic framework in which to process information that is time sensitive for all your schoolwork in each of your subjects.

As you can see, the Workcenter Organizer kit is designed to be used with a ring binder. Since each child typically desires a different type of personal binder, this part of the system is not included as part of the kit. It needs to be supplied by you. Also, since the step of archiving is usually handled in different ways—including plastic crates, file folders, shelves or similar means—only a basic archival capability is included in the deluxe kit. A number of other archival products are offered separately.

This description covers the basic work center configuration. Additional configurations as well

as archiving products are covered in detail in Appendix B.

- Folio WorkCenter™ Organizer  
Hints and techniques for getting started

## EXCERPTS FROM THE USER GUIDE PROVIDED WITH EACH WORKCENTER ORGANIZER KIT

There is no stronger feeling of being organized than successfully using a system you invent for yourself. This kit is intended to help you build a good system. Used alone, you will gain the advantages you are seeking, but used in combination with a teacher and even better, a teacher and a parent, the benefits will be amplified.

### Assembly Instructions

Select a host binder for holding the transaction inserts. The transaction inserts will fit into any standard three ring binder and are compatible with any of the canvas and vinyl binders readily available at your local stationer.

### “All In One” Approach:

If you are using this system for the first time, and have workcenter pocket sets for each of your subjects, we recommend that you place all of them into a universal, all-in-one binder. We recommend the use of at least a 1-1/2” ring. Selecting the most durable cover and the heaviest duty ring will give you the most enjoyment from the system throughout the school year. If are an experienced user, or you have a schedule that lends itself to carrying different subjects each day, you may want to try the modular or one subject per binder approach. See below.

### “Modular- One Subject Per Binder” Approach:

If you decide to group each subject into a separate binder, we recommend a set of binders with light weight, flexible, plastic covers having the smallest diameter ring. Ring diameters of 5/8” will allow you to carry sufficient papers while minimizing the bulk associated with having multiple binders.

If you choose to separate subjects into individual binders, you may want to make one of your binders your “master binder”. Using the separate binder approach, it is advisable that you keep not only your master calendar, but also your homework planner form, a universal important information table, as well as a pocket set for general papers, resources, and miscellaneous stuff.

The transaction binder inserts provide a place for everything current, so you can place everything in its proper place each time, each day, and if you do, you will find you are really good at being organized

## Hints for getting the most out of your Workcenter™ Organizer

### GETTING STARTED/USING YOUR CALENDAR, HOMEWORK FORMS, LABELS, AND NOTEPAD:

Date the self-dating™ calendar. Select the starting month and day for your school term and then fill in the remaining dates without leaving any spaces. Use this calendar to record all key school events and holiday breaks as well as any other schedule commitments. Make each entry as soon as you find out about it. Keep just one calendar.

Unless your teacher hands out preprinted homework assignments for the week, make a copy of the homework by subject table for each of your subjects using the homework by subject Copymaster™ form. Label each table for each separate subject. If you use the “all in one” approach, a good strategy is to place all of your homework tables at the front of

your binder along with your self-dating™ calendar. This will help you quickly see what work is due for the week and the events which you may be required to participate in. Upon the completion of each unit, be sure to store the homework table with your completed work papers as described below in the archiving discussion and start a new copy of the homework table for that subject.

Next, place at least one copy of the weekly work planner form at the very front of your binder and use this to lay out your work plan, by subject, for the week(s) ahead. In this way, you can better spread your work load out so that you are able to meet your deadlines for assignments, prepare for tests, and participate in all scheduled events, while preserving precious free time for your personal activities.

Use the important information table printed on the face of each tri-pocket to keep important records. There are spaces for phone numbers, project data, and test scores. You can make an additional copy for universal information and keep it in front of your binder with your other forms. As the term progresses, make successive entries on this form to track your performance against your goals.

Use the preprinted labels to mark your pockets. The steps to do this are detailed below. Use the self-tabbing labels to section off your transaction binder and mark sub topics in a subject. The self-tabbing labels also come in handy for sectioning off your archives by unit (see archiving discussion on p.4). Mark the label according to its purpose. Write in a name you will easily recall, attach it to the page edge, and fold over.

Put the PopPad™ with Notepaper2000™ at either the front or back of your binder. If you are lefty, we recommend you place it in the front, since you will probably want to have it pop out to the left of the binder. The PopPad makes sure you always have a piece of note paper readily available, no matter which section of the Workcenter Organizer you are in. Fold the PopPad on its hinges a few times to “work it in” and to get familiar with its patented motion. When you are ready to take notes, move the pad into the location that most suits your needs. The paper is specially formatted to help you take better notes. Use the left margin to mark important dates, names, and events. Pick a symbol to reference these kinds of notes and mark them in the margin space provided. When you have other material that is related to the notes, use the right margin to cross reference your work. In this way, you can find the related materials later, when you need to study all the work together.

Your transaction binder is the place for everything “current”. Be sure to put everything in its proper place, each day. If you do, you will find you are really good at being organized.

## GETTING STARTED/The First Day- LABELING THE POCKETS IN YOUR TRANSACTION BINDER:

Pick a color for each subject and label each Subject Portfolio with the name of the subject by placing a blank subject sticker on the front and entering the subject name in bold print. If your school or teacher is using a common color coding scheme, use the color/subject match prescribed to you.

Label each Subject portfolio's interior front pocket with the title “Hot Sheets”. Keep important or time critical papers for this subject here. Label each Subject Portfolio's interior back pocket “Reference Sheets”. Keep documents you will need to refer to for this subject throughout the term here.

The Subject Portfolio acts like a “cocoon” into which are nested your notes, other pockets, and forms. You can think of the subject portfolio as the outer most pocket of a “hierarchical pocket set”. The pocket set is structured just like the file directory on your computer. The Subject Portfolio is the master file folder, and your notes, tri and book pockets, nested within, are the sub files.

Label each of the patented Tri-pocket work files using the pre-printed labels. Put the “WORK DUE” label on the front pocket. Put completed work you are expected to hand in here. Put the “TEST/QUIZ” label on the second pocket and keep all tests and quizzes returned for the current unit in this subject here. Put “HOMEWORK” on the back pocket. Keep all homework and other papers returned for the current unit here.

Label each of the patented Book Pockets for the kind of class notes or handouts you will keep in it. Nest the book pocket inside the Subject Portfolio along with the tri-pocket. The Book Pocket allows you to quickly store away handouts that may not have been three hole punched. Once stored within, pages in the book pocket turn like a book by releasing their corner ends. Access to each page makes the book pocket ideal for papers you may need to write on.

## KEEP GOING/DAY IN AND DAY OUT USING YOUR TRANSACTION WORK BOOK:

The Workcenter is the heart of your document handling activities for each subject and is used in a similar way for each subject. This is the place you store your contextfolios™. A contextfolio is the group of current papers for the unit of the subject you are working on. To keep organized day to day, place each different type of paper into the correct pocket as soon as you create or receive it. File according to the labels you have marked.

The Book Pocket can be used for handouts, study notes, reports in progress, or other “insert documents” that you want to keep grouped together and easily referencable. Pages in the Book Pocket turn like the pages of a book, without having to punch the papers or put them directly on the rings. We recommend that you put your class notes on the rings directly after the tri-pocket work file for this subject. The patented slot holes of the Subject Portfolio allow the folder to be opened and to lie flat. The slots also allow you to open the rings and put in or take out material from within the “cocoon”. This permits quick and convenient workcenter document handling at the flip of a Subject Portfolio cover. Use the PopPad™ flip out notes pad with the specially formatted Notepaper2000™ to take class notes day to day and to complete homework. Tear the pages off the pad and put them into their proper place. You will find that the pad conveniently pops out to the side, pops on top, and can be placed as a marker into the Subject Portfolio. When empty, refill with a new PopPad unit.

### Archiving

If you selected the deluxe kit, the archival binders are included. Otherwise, you will need to provide your own separate archival binder for each subject. Be sure to get a binder with storage capacity for a terms worth of papers. Archival binders provide a place for completed works. Use one binder for each subject. You put your work away here each time you complete a unit. Choose the most economical archiving means available, since durability is not an issue.

There are two basic ways to archive. You can elect to move the filled pockets from your transaction binder to the archival binder for that subject. Alternatively, you can move the contents of each of the pockets to the binder. In the first approach, you will need to have additional pockets ready to insert into your transaction work book to begin capturing your next unit of work. In either approach, be sure to accurately label the contents so that you can more readily identify the completed units when you decide to reference them later. If you decide to move the contents of the pockets to the archival binder rings, consider using separator sheets between units and label them accordingly. If you follow the steps below, your daily binder will remain streamlined with only your current papers.

## KEEP GOING/WEEK TO WEEK AND MONTH TO MONTH:

Each time a “unit” is completed, label, date, and remove completed notes, handouts, returned tests, quizzes, and homeworks. Store them along with the homework table listing all of the work done in the archival binder for that subject. Keep the work separated by type, and place it directly onto the rings of the archival binder for that subject. Use the self-tabbing labels with colored page separators or use standard indexes where needed to help you identify different work. This batch is your contextfolio for that unit. When you have to find this work later, for review, at mid term, or term end, it will all be neatly grouped “by context”, ordered according to how you captured and stored it, for instant access and review.

This step, called ARCHIVING, is a very important step in your use of the Folio Workcenter™ Organizer. The key principle in archiving is knowing when you are done with a unit. You need to know how to remove it and label it so you can find it later for reference. Not only will effective archiving keep your day to day transaction binder the lightest and most current it can be, it will allow you to maintain a neat book bag, as well as a neat work space at both your school and home desk. You will be able to find selected material, on demand, as quickly and easily as it was to put it away, without wasting time searching. If you practice these steps regularly, you will find you are really good at staying organized.

Archiving is a lesson you will learn using the WorkCenter™ Organizer. First you need to recognize when you’re done with a unit. Then you need to learn how to put it away so You can find it late. That’s all there is to it, and if you do it, you will find you are really good at staying organized.

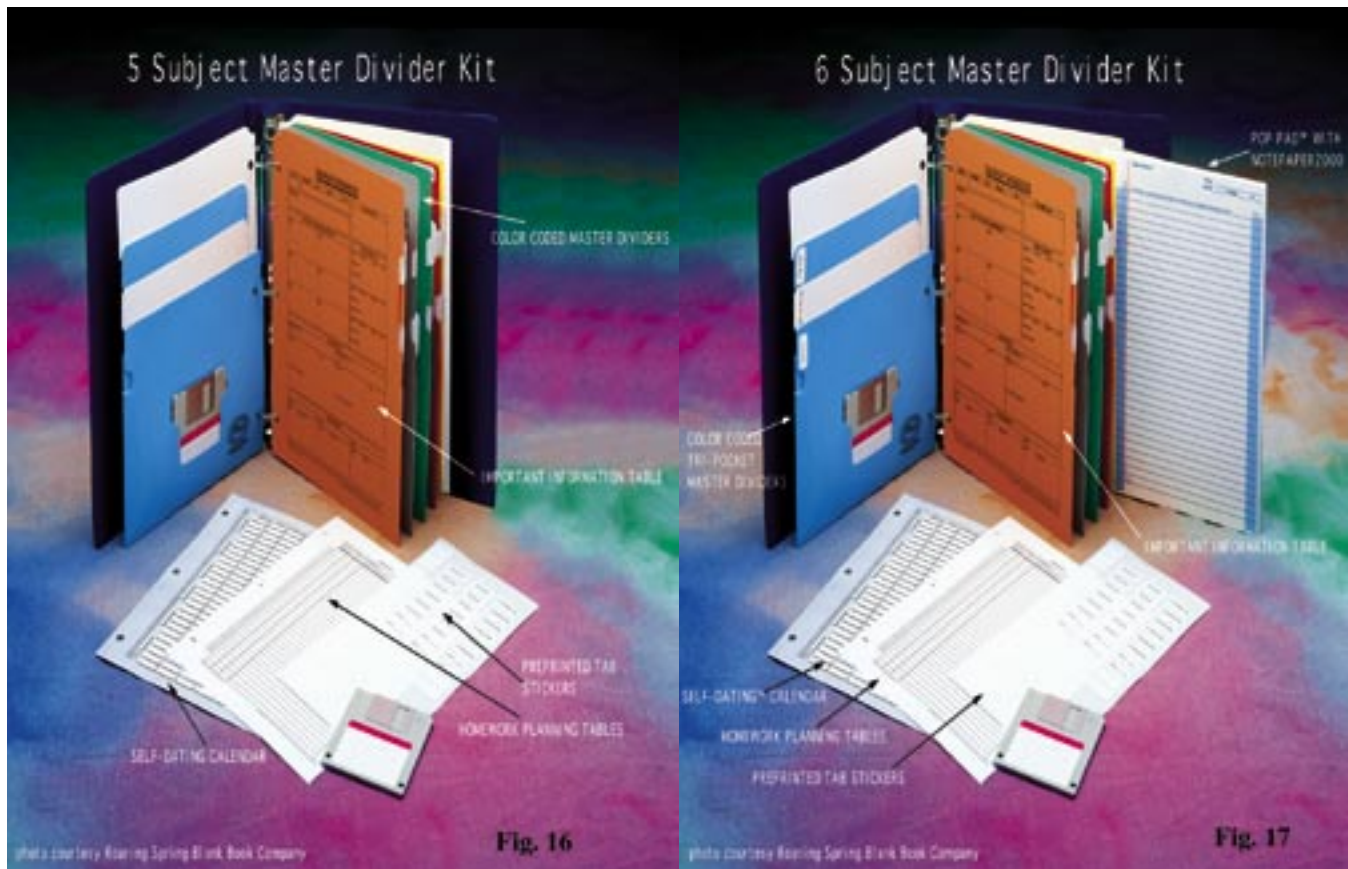
## Appendix B- Additional Tools Of The Trad

- Alternative WorkCenter Products  
Additional configurations available

There are a variety of additional Pockets Plus™ products designed to suit differing styles. Each provides a different degree of integration and modularity. Some offer more economical ways to get started in binders. Others are provided for students that prefer to use wire bound note books. They offer different levels of support for children of different ages.

**Additional Binder Configurations:**

For use with binders, there is a Pockets Plus WorkCenter kit that comprises a set of tri-pocket master dividers, the preprinted labels and the copymaster forms. This version comes in a five-subject package, Fig. 16. It is capable of handling work due, homeworks returned and tests and quizzes returned. Class notes are stored directly on the rings after the color-coded master divider for each subject. There is also a six-subject version of this kit, Fig. 17. The six-subject kit has one additional master divider and includes a pop pad with notepaper 2000. Both of these kits are shown below.



**Fig. 16**

**Fig. 17**

The basic wirebook format, Fig. 18, known as Pockets Plus™ theme books is suitable for use by children who are used to separating one subject into each wirebook, or who are used to using a multi-section wirebook. This line is also good for journaling applications, where you want to begin teaching elementary document handling skills. These units have a tri-pocket cover and a set of unprinted tab stickers. They come in 1,3,and 5 subject versions. A 1 Subject theme book is shown below.

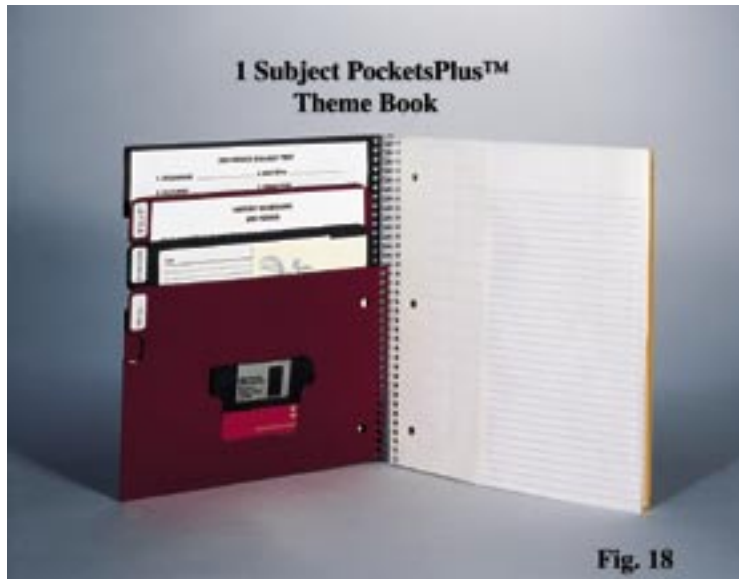


Fig. 18

There is also a line of wirebound Superbooks™ which are available in one, three and five subject versions. Superbooks include a sheet of preprinted labels as well as all of the copymaster™ forms needed to implement a successful document management program. Each section of a superbook has a tri-pocket divider with an important information table printed on it's face. A 1 subject superbook is shown below in Fig. 19.



Fig. 19

- Archival Product Options

What options are available for archiving ?

Central to the working of each “transaction” workcenter, is the notion that along with the input and processing of information is the output of that information. This involves the removal and storage of work no longer needed for reference at the present time. We call this the archiving step. The archives are the “cache” where you store information for reference. Each transaction workbook solution needs to be complemented by an archiving strategy for the system to achieve it’s maximum results. An archive binder is used for each subject to store completed work: homework, quizzes, tests, notes and handouts, grouped by unit. Archiving takes a little practice to master, but once learned, is a skill that will last for the rest of your life.

Archival binders are included in the deluxe Workcenter Organizer kit, since this part of the organizing task is considered super critical to the effective performance of the entire system. The kind of binder included in this kit is the most basic in construction and the lowest cost option available. You can upgrade these binders as the need arises by simply replacing each with a separate, color coded three-ring binder of preferred cost and quality. This upgrade is optional as the archival binders provided with the kit meet the minimum need for storage demanded in most classroom settings. Fig. 20, below, shows a closeup of an archival binder card.



There are additional products available for archiving, including ones that are designed to assist in gathering of larger, bulkier items associated with a units work. Bigbox™ is a stackable corrugated box that you fold into shape from a flat blank. It is designed to hold a

binder and related papers for a subject. Fig.21, above, shows a stack of storage boxes.

The purpose of our document organizing kits is to provide a transitional system that enables the user to develop document organizing skills that will stay with them for the rest of their lives and which will be useful in the adult world of home and office. The school environment for which they are designed is an exceptionally robust real world one, in and of itself. The tools provided are really “power tools”. They should be of considerable use to each generation of children moving through early developmental stages in learning the process of organizing, just like the training wheels on a bike for the novice rider, the airplane simulator for the pilot, or the safety rope for the climber.

Of course, parts of these tool kits can play a continuing role in day-to-day work as the child’s skills develop. They can play a role for the adult mentor and can be used in the home or office. The various parts of the tool kits can serve as building blocks for developing personal, application-specific solutions for a variety of document-handling problems

## Appendix C- About the Author

- David C. Schwartz, Chairman & CEO, Productive Environments Inc.

David C. Schwartz is the founder and CEO of Productive Environments. He is the inventor of the Workcenter Organizer tool kit and its various components. His company is responsible for licensing commercial embodiments of the tool kit and has been directly responsible for technology specification and patent protection. Mr. Schwartz brings 16 years of experience from the computer industry and 10 years of experience in stationery products to the design of new information handling products for use in the stationery products, software and consumer electronics industries.

Mr. Schwartz studied at Cornell University where he received his BSEE degree in 1971; at Massachusetts Institute of Technology where he received his MSEE in computer science and operations research in 1973; and at Boston University where he received his MBA in 1979. His accomplishments include the design and software engineering of commercially delivered software systems to both business and government. The last six years of his work in computers focused on advanced applications in symbolic processing, object oriented data representation, expert systems and Artificial Intelligence as director of new business development for a major electronics manufacturer.

In forming Productive Environments, Inc, Mr. Schwartz has established a company dedicated

to bringing the benefits of computational environments to users of conventional pen-and-paper-based information handling tools. By conceiving, prototyping, testing and patenting innovative pen-and-paper-based stationary products based on PEI proprietary information handling technology, PEI's mission is to improve the organizing effectiveness of the individual and, through this, the individual's learning skills and personal productivity. PEI licenses these products to direct manufacturers and OEMs on a worldwide basis for use by children and adults in the home and in the office. PEI assists its licensees market, sell and distribute products based on this technology. It also works with its licensees to develop value-added applications and services in order to increase the overall demand for these products.

An active research interest of Mr. Schwartz's is the application of Workcenter Organizer technology in the development of early childhood learning strategies.



**photo by Alan Jung courtesy Middlesex News**















































































