



National StRUT Alliance Workshop

Arizona, California, Louisiana, Michigan, New Mexico, Oregon, Texas

Sponsored by: SIA Semiconductor Industry Association

August 23-24, 2004
Dallas Texas, Embassy Suites

MINUTES

August 23, 2004

1. **Welcome from SIA** (Semiconductor Industry Association)

The workshop was opened with a welcome by Dave Ferrell, Director of Workforce Strategy, SIA, sponsors of the workshop. SIA is a trade organization with a board composed of heads of semiconductor companies. SIA is interested in having a workforce source available in the future, and Dave's responsibilities include working with groups such as StRUT to prepare that future workforce. The funding for the workshop comes from the member companies.

a) **Agenda Review** - Cliff Monroe and Rendee Dore' from the Silicon Valley StRUT Alliance based out of Mission College, Santa Clara, California, coordinators of the workshop, introduced themselves and reviewed the agenda and registration packet contents.

b) **Meeting Purpose and Goals** – Cliff and Rendee presented the purpose and goals by “setting the stage” for the workshop. The purpose of the meeting was to gather delegates from various states who are involved in promoting computer recycling to benefit education in their states. Electronic waste recycling provides much needed computer equipment and funds for various areas of education in the member school districts. Goals include reconvening and energizing the national StRUT Alliance to strengthen all programs and coordinate efforts, building a systems approach to e-waste recycling. Workshop participants will share ideas and best practices to help each other to meet individual and collective goals.

Desired Outcomes:

- National list of existing StRUT-like programs - working together for leveraging interests
- Individual site/state strategic plan outline, framework and timeline
- Decision for a national StRUT program

The bottom line is to place more technology education and computers in the hands of students.

2. **Introductions – Getting to Know You** -- Each attendee presented a short address on their organizational structure, academic involvement, their recycling system, and how the recycled computers are delivered to their educational system.

New Mexico – Mike Carpenter runs a non-profit organization called Computer Reruns, which recycles computer technology into the schools. **Their volume has grown steadily; they now distribute roughly 1000 units per year.**

Gene Sturgill has a private company called DP Signal serving rural K-12 school districts. He recycles equipment from rural districts, and teaches teachers how to instruct in math and science in conjunction with Los Alamos Labs.

Michigan – Connie Banks and Dave Keith reported for the Michigan State Industries and the Ryan Correctional Facility, a for profit organization. Inmates refurbish computers, which are

sold to non-profits and to educational systems. **The focus of their programs is education for the inmates** so that they will have a profession at the time of their release.

Louisiana – Nancy Jo Craig works for CACRC (Capital Area Corporate Recycling Council), a non-profit 501(c) (3) that recycles donated equipment; **they have 80 member schools from many areas of the state.** The CACRC donates systems to Louisiana schools and resells systems to the public. **They donate an average of 4000 units per year to schools.** Their funding is from state grants and from resales.

California – Cliff and Rende reported on the Silicon Valley StRUT Alliance, which has been in operation since 1998. It is a non-profit organization, operating through a community college, that recycles equipment into the classroom and supports curriculum and teacher training in the member schools. **Approx. 1,000 computers are refurbished and donated to the educational system per year.**

Dan Ordaz was introduced as a resource person providing the school administrative perspective as a member of the California contingent.

Jim Lynch reported on CompuMentor, a 501 (c) (3) charitable organization that recycles for schools. He also started a company called TechSoup, in cooperation with the San Francisco area schools, to provide technology to schools. **Roughly 200,000 computers are donated through this organization; Jim says 28 million computers are needed.** He currently is working on state policy to provide donating companies a tax incentive to continue to donate used technology. Jim touched on the importance of legislative leveraging. He is also working on a National Computer Reuse (NCR) conference that will address the huge wave of e-waste that is facing our culture and how society can deal with it. Jim spoke briefly about a National Electronic Product Stewardship Initiative (NEPSI) proposal that will design a computer recycling system for the US. States that are involved with e-waste initiatives are California, Minnesota, Maine, and Massachusetts.

Jim reported on the Christina foundation, a group that matches donating companies to recipient groups for the recycling of technology equipment. Brochures were passed out.

AR (Action Required) – A recycling model to look at is Computers for Schools in Canada.

AR – Regularity of standards is needed for waste recyclers – to be discussed at the Chicago NCR conference, September 17 & 18. www.pcsforschools.org/nrcs

AR – Jim will send everyone info on the Chicago NCR conference

AR – It was suggested that Jim present at a SIA meeting – re. NEPSI work/direction

AR – It was suggested that Dave Ferrell work with Jim Carven of AeA – his working with the recycling process

Auction BDI – Shawn Caliouette spoke about his for-profit company that partners to warehouse, transport, and recycle/sell equipment in conjunction with the Silicon Valley StRUT Alliance and provide funding for the StRUT program.

Oregon – Marty Willie reported on the reorganization of their StRUT program, which lost funding last year and was forced to downsize. At its peak, Oregon StRUT directed by Greg Sampson, had over 135 school members around the state. Approx. 3,500 students were being served – many being at risk students. Marty works out of one of the state school districts to reestablish the recycling program in Oregon and support member schools. They are at 43 schools now.

Greg Sampson works for an Oregon company called Earth Protection Services, which assumes liability for donating companies, and works to keep the donated equipment in the US. They are also working to certify e-waste handlers in the state. Greg previously served as the Oregon StRUT director. Greg had also developed StRUT Viet Nam and Nigeria programs.

AR – Greg commented on how important it is to check out the downstream vendors used. There must be a level of accountability for recyclers. He suggested to think of regional centers for ease of transportation

Arizona – Ken Mystrom’s program is Technology Partnerships, which began through his employer, Motorola, with public schools. It is a non-profit recycler for education and **provides 3200 computers per year.**

3. Showcase Best Practices - State/Site Briefings per matrix survey

(Prior to this workshop, a survey completed by all attendees identified their organization’s rating on each practice listed and underlined below. Ratings were 1-3 with 3 indicating a high level of development and proven successes. Attendees were asked to showcase those practices that they rated the highest.)

- a) -Management and Organizational Structure
-Process of Program Management and Operation
-Written Policies and Procedures

Presented by Michigan – David Keith -- MSI (Michigan State Industries) is a model organization; the management structure was highlighted. David also showed a PowerPoint presentation on MSI’s operation and program management and distributed copies of a CD with that information. The MSI program is strong on regulations; the recidivism rate is 20%.

- b) -Assessment of Students and Programs

Presented by Michigan – Connie Banks - The Ryan Correctional Facility assessment program was highlighted.

- c) -StRUT Marketing to Key Stakeholders
-Materials Recycling Program
-Facilities

Presented by Oregon - Greg Sampson - Marketing approach tips

- Invite unannounced audits – to bolster credibility in the program, remain transparent
- Stay abreast of changes in e-waste industries

By accepting the donation, the program owns the materials and the program becomes liable for downstream use. Work with legislatures in the states.

- d) -Curriculum
-Academic Integration
-Vertical Slice Curriculum Articulation
-Vertical Slice Waterfall Resource Delivery
-Student Competitions

Presented by California – Cliff Monroe and Rendee Dore’ -- Cliff and Rendee showed the curriculum that has been posted on the StRUT (www.svstrut.org or www.engineering-ed.org) website and is available at no cost. The curriculum meets academic standards for math, English, etc. Vertical Slice refers to sequenced curriculum from elementary school to college that will build on each educational level to prepare the student academically in technology education.

Local StRUT competitions are held each year for students to compete in the areas they have been training for: building computers, troubleshooting computer problems, and making a presentation on the computer build.

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Continuation of Best Practices Showcase

- e) -Quality of Equipment Donated and the Extent it Meets School Site Needs
-Funding Sources/ Business Plan
Presented by Arizona – Ken Mystrom -- Ken reviewed with the group his sponsorship drive plans for 2004. A program can survive with a combination of corporate sponsors, grants, and revenue from recycling. He also uses a press release periodically to solicit donations.

- f) -Advisory and Governing Boards
-Administrative Support
Presented by Louisiana – Nancy Jo Craig -- The CACRC (Capital Area Corporate Recycling Council) Board of Directors that Nancy works closely with is the model reviewed. She shared job descriptions and responsibility lists for board members. Nancy also encouraged job descriptions for agency employees. A CD of here information was given to Rendee.

- g) -Inventory of Students and Programs
-Data Collection/ Accountability
Presented by New Mexico – Mike Carpenter and Gene Sturgill -- Since they are a service group, the New Mexico program tracks schools rather than individual students. Through a database program, equipment donated to schools as well as that sent to recycle is tracked. Program information was given out in CDs.

- h) -StRUT Teacher Training
Presented by Oregon – Marty Willie -- Marty offers a 5-day course once per year and will be increasing the sessions because of the increase in the number of schools served. The goal of the training is to increase the technical expertise of teachers to make them better teachers and to give the students a better learning environment.

2. Recap of the First Day Activities

- Parking Lot items
 - 1) NCR (National Computer Reuse) conference info – from Jim Lynch. Conference to be held September 17 & 18 in Chicago. Go to the web site for details – <http://pcsforschools.org/ncrs>
 - 2) Concern about donations replacing a sale – such as from E-Bay sales and the objections that will be encountered from major companies. We need to approach this as a philanthropic endeavor to get around their objections. Name branding to students could be a benefit for companies to be involved with donations and the recycling process.
 - 3) NEPSI (National Electronic Product Stewardship Initiative) – computer recycling system for the US – It is imperative to become involved with NEPSI to develop legislative action and standards.

AR - Large companies need to step forward and get others involved, as systems approach needs to be established.

- a) **New Program Development “Quick Start”** -- Developing a local StRUT Alliance. Cliff reviewed the approach that is presented to districts through California to begin a StRUT regional alliance for donations and a delivery system in their region – supporting education in technology, technology equipment to the schools, and assisting e-waste solutions.

3. StRUT Operations

- a) **Industry Partnerships** – Chip Walsh spoke on Technology Recycling at IBM. IBM designs for reuse. In the Americas, they receive about 750,000 returned computers per year, from leases

or other sources. They reconfigure the machines for resale or scrap them depending on value of the equipment and demand. Other areas are disk wiping and parts sales.

AR – Dave and Chip to speak to IBM about taking some of their computers for StRUT

AR – A suggestion was made to have Chip and Dave work with Larry Butler of IBM to assist in the development a model partnership (Industry and Education) StRUT alliance in North Carolina.

- b) **Recycling Partnerships** – Shawn Caliouette, Auction BDI, works with the California program to resell and recycle unusable equipment. They auction marketable equipment and share the revenue with suppliers. BDI is a valuable partner for StRUT by providing warehouse space, donation transportation service, recycling for e-waste, and revenue sharing.

4. **Developing the Strategic Plan** – *To be done individually offline*

5. **Problem-solving, brain-storming, and planning session** – *Due to time constraints, this section to be completed individually offline with forms and instructions contained on disk that was distributed*

- a) Individual site analysis, pros/cons – Information
- b) Critical tasks each site needs to take
- c) Individual site strategic planning, next steps

6. **Team Report Outs** – *Were not done in the interest of spending the time to dialogue on next steps*

7. **Next Steps for National StRUT Alliance**

StRUT Alliance decision/plan, strategic plan, legislation, and marketing

a) **Desired Outcomes** that were presented at the start of the workshop:

- National list of existing StRUT-like programs
 - **Need to also find recyclers nationwide**
 - **Could work with Jim's website to begin – NCRS Conference could also be a start**
- Individual site/state strategic plan outline, framework and timeline
- Decision for a national StRUT program
 - **Consensus for a national organization – within a year**
 - **Announce the organization by March, 2005**

b) **Establish priorities for the StRUT program**

- 1) Funding from diverse sources
 - as a non-profit
 - balance inventory
- 2) Maintain communication between states/programs
 - web site for centralized reporting
 - database for materials in and out → remarketed
 - auditable process for what goes in and out
 - for credibility

AR – Work with Jim Lynch – to coordinate with CompuMentor web site

AR – Everyone to share information with Jim – networking at a larger national level

- 3) establish standards – “guidelines”
 - identify basic principles to guide actions, then develop standards, a code of ethics
 - community service tied to recycling – a unique trait
 - finding a second life for equipment
 - will give a sense of cohesiveness
 - strength in numbers – with different “StRUT” groups
- 4) identifying other “StRUT-like” groups

AR – Look into working with Jim Lynch's and his organization to develop a list serve?

c) **Why a national StRUT? What are the precepts?**

- Gain leverage & clout with government officials
- National public policy
- Equipment to students at minimal or no cost
- No recycling off shore
- Best practice and information sharing
- Balancing of inventory at StRUT locations across nation
- Need a recycler in each location – due to new federal laws
- Central leadership group for standards
- Certification of excellence
- Save tax dollars

AR – Have an intern develop a survey to establish StRUT-like programs in the nation

d) **Why be a member of National StRUT?**

- Pursue national level funding and support
- Federal level legislation to provide tax breaks for donations
- Sharing knowledge, standards, curriculum
- Leverage with large companies
 - financially – e.g. national grant
 - sharing of equipment
- Public policy support
- National voice for concerns
- An organization to spearhead it
 - allows for independent identity
 - not reinventing the wheel – save time and money
- Resource base
 - curriculum
 - certification
 - policies and procedures
 - data collection
- Strength in the diversity of the members
- As a recycler - transportation
 - stability in volume
 - potential for more companies
 - lower costs
- Collaboration
 - develop a more comprehensive program
 - “waving the StRUT flag”
 - excellence

e) **Who do we serve?**

- | | | |
|-------------|---------------|---------------------|
| - Education | - Non-profits | - Community service |
| - Industry | - Prisons | - Adult education |

f) **Mission statement** – Provide technology for underserved populations, engaging students for technology career pathways, keep equipment out of landfills, ethics

- support education – provide technology
- organization fills a gap
- emphasis on underserved populations

AR - Pursue national level funding – federal legislation, tax breaks for donations, national NSF grants

AR – Need to develop an individual to develop framework for national grant – funds to make it happen

Action Items For Next Step Efforts:
(See attached “Planning Timeline”

- Mission Statement written – Cliff & Rende (by 12/1)
- Strategic plan written
- Draft budget
- Concept paper – including the mission statement (a white paper) - Cliff (by 12/1)
This would include all the points from the flip chart sheets, in sentence format.
- Marketing materials created
 - Brochure (a glossy) Establish a framework - Gene
 - Printing – Gene’s contact
 - Fact sheet– Put sentences on all the action items to become part of fact sheet – Rende by 2/1
 - Have membership defined – other players found – Ken Mystem
- Website built – paragraph about this meeting and contact names – need website to put on marketing materials
- At present each site would us their website for the national work
- Steering committee in place – made up of attendees to 8/23-24 workshop – later to identify a board and develop a non-profit 1C3H
- Communication tool in place – list serve – Marty w/Jim Lynch (by 9/1)
- Name the organization – need a name before we build the website – suggestions to Rende (by 9/3)
- List of transporters and recyclers – Shawn, Greg (by 1/1)
- Membership: develop a subcommittee and a tool to contact potential members - Dave Ferrel, Dave Keith (by 2/1)
- Intern to do a survey of StRUT endorsed recyclers

8. Summary Speaker - Greg Sampson

Legislative action – go to his website to find out what is going on in each state, e.g., CA Senate Bill 20 - State Electronic Waste Legislation

Pros and Cons of This Workshop

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1. Diversity	1. More space in meeting room
2. Share material	2. Too much agenda – not enough time
3. Give aways	3. 2 full days needed
4. Energy & positive environment	
5. Location of facility & amenities	
6. Goals accomplished	
7. Starting to work on concepts	
8. Growth from interaction	
9. Continued action	
10. Phyllis & Rende’s preparation	

List of Attendees

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