

BEST!

Business and Education Successful Together

Status update 6/19/15

The BEST! program was presented to teachers at the development meeting for the NGSS curriculum. As a result:

Gina Hoppe (5th grade Fritsch) and Genevieve Christie (5th grade Fremont), visited Micromanipulator June 18 for a tour and initial discussions regarding implementing the program in their classrooms. Various ways of using day to day activities at a manufacturing firm to help illustrate classroom concepts from teamwork, to the "flow" and parts of written communications, to mathematical concepts and graphical concepts (X-Y axes are a natural for Micromanipulator for example) were brainstormed.

A sample Business Partner introduction and Newsletter (attached) were reviewed.

We will be meeting prior to the start of the new school year to review lesson plans and sketch out ways for interaction and participation, and to kick off the program with back to school communications to students.

A total of 15 elementary teachers have expressed interest in participating in the program. The preferred plan is to start with one (or two) elementary, one middle school and one high school class matched with the current 3 businesses who are willing to work on the pilot phase of the program and work through the activities to round out the approach for other businesses and classes. However, Mike Jackson will communicate with the interested teachers to see if it is possible to expand the "pilot" phase.

Michele Lewis (Carson High CTE) has expressed her support. A "champion" at the middle school level has yet to be contacted.

Micromanipulator (Kathy Jackson) has agreed to administer the program from the business side and will provide support for newsletter creation and interaction coordination.

LATE MATERIAL
MEETING DATE 6/25/15
ITEM # 6

BEST!

Business and Education Successful Together

The **BEST!** Program is designed to promote Businesses and Individual Classes working together towards the goals of the Empower Carson City Strategic Plan for Extraordinary Schools, including the following plan goals:

Goal 1: Actively connect students with learning beyond the classroom

Goal 2: Engaged Parents and Guardians

Goal 4: Curriculum that Matters:

Goal 5: Exceptional Administrators, Teachers and Staff:

The program connects a Teacher and their Class to a Business.

The Class gets a “**Content Mentor**” who can help provide the Teacher with everything from business world examples that illustrate concepts in their instruction plan, to helping with student (and even parent) encouragement of the possible “rewards” of their learning in the workplace! You as a Teacher can “tap into” your Business partner to enhance your instruction plan.

The Business gets a better future workforce and gets exposure to the education and general community with possible recruiting benefits (including possible interns, as well as parents and family of students), supply source and networking benefits!

The relationship is *cooperative and supportive*, respecting both the educational expertise of the Teacher and educational system, and the businesses’ understanding of workforce capability needs and the application of academic concepts to everyday job actions. The funding is *affordable but adds up substantially* as the program continues and grows.

See the back page for some more benefits! If you want more information or to get started, contact:

Carson City School District: Valerie Dockery Director of Grants & Special Projects

Carson City School District office: (775) 283-1523 fax: (775)283-1590

vdockery@carson.k12.nv.us

Mike Jackson: President, Micromanipulator (775) 882-2400 fax (775) 882-

7694 mjackson@micromanipulator.com

BEST!

Business and Education Successful Together

BENEFITS

Class / School Benefits:

1. Teachers can get input into helping equate academic learning to real-world applications for the students.
2. Teachers can get help creating project assignments.
3. Teachers can get recommendations regarding skills that might be overlooked – for example the value of being able to estimate in your head to see obvious errors before proceeding.
4. Teachers can get real-world application information that they may not have making them a stronger Teacher.
5. Teachers can get help showing the values of soft-skills.
6. You get a partner who may help you energize a bored - gifted student and perhaps help in energizing a student who is not getting support for their education from home (perhaps by showing the student's parents what is possible in a real-world job opportunity).
7. You get a stronger school / business / community bond with an opportunity to share your goals, objectives, efforts and concerns with some depth with people and concerns that have some influence in the community.
8. The school district and your class get extra funding.

Business Benefits:

1. You have input into helping equate academic learning to real-world applications for the students. You can have impact on skills that might be overlooked.
2. You can provide real-world application information that the Teacher may not have making them a stronger Teacher.
3. You get your name out - through distributed newsletters and your logo and business summary in the classroom - without going through a medium that might attract regulators giving you:
 - a. Word of mouth help in recruiting for job openings.
 - b. Word of mouth recommendations for job seekers.
 - c. Word of mouth advertising for possible customers.
 - d. Goodwill for your employees in supporting their children.
 - e. Goodwill as a community and education supporter.
4. You can have an impact on stressing "soft skills" such as the importance of attendance, working together with others and communication skills.
5. You can have access to possible interns who are comfortable with your business and can hit the ground running a little better.
6. You may even get some valuable information from the student's uninhibited viewpoint if you help construct a project assignment with the Teacher around an actual problem or project you in your business.

Additional Resources provided by business to class: Partners determine what they can offer.

1. Attendance at Back to School nights to field parent questions.
2. Presentations to class as (if) requested by Teacher on subjects to help illustrate instruction topics.
3. Attendance at parent-teacher conferences or for specific meetings as (if) requested by Teacher, to help emphasize the opportunities available through good attendance and / or study habits.
4. Informational visits to sponsor business scheduled with Teacher for individual students, entire or partial class, and / or students with parents.
5. Internship opportunities if appropriate.



Micromanipulator

1555 Forrest Way, Carson City, NV 89706
775-882-2400 www.micromanipulator.com
Fax: 775-882-7694

WHO WE ARE:

Micromanipulator is a manufacturer of "Analytical Wafer Probing" equipment for the Semiconductor Industry.

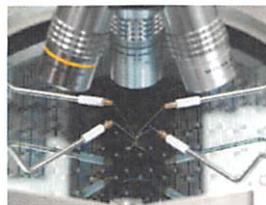
That means we make equipment that is used to test the tiny circuits inside a computer "chip" or on an electronic "board" (like the one inside a Kindle). The equipment we may ranges from verrrrrrryyyy sharp needles ("probe") to big machines that hold the needles and let engineers put them into position on a circuit that is less than 1/100th the size of one of the hairs on your head!



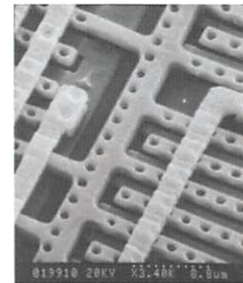
Here is one of our big stations



Here is some software we write



These are our probes on a wafer



This is what the circuit our customers test looks like under a very high powered microscope!

In our company we have:

- Sales Managers, Sales Engineers and Sales clerical support people
- Marketing people
- Accounting, Human Relations ("HR" or "Personnel").
- Electrical Assemblers and Technicians,
- Mechanical Assemblers and Technicians
- Chemical, Electrical, Mechanical, Software Engineers.
- Design Engineers, Manufacturing Engineers and Service and Applications (helping customers) Engineers.

STEM subjects are pretty important to us. It helps even people who don't do technical jobs to know science and math basics. Communication skills, including writing and computer us skills are always needed.

We have been in business since 1956. We have customers all over the world and our sales and service people travel to lots of different places in the USA and around the world for those customers.

Work at Micromanipulator is ALWAYS interesting, we have lots to do and we learn something new every day!



Micromanipulator

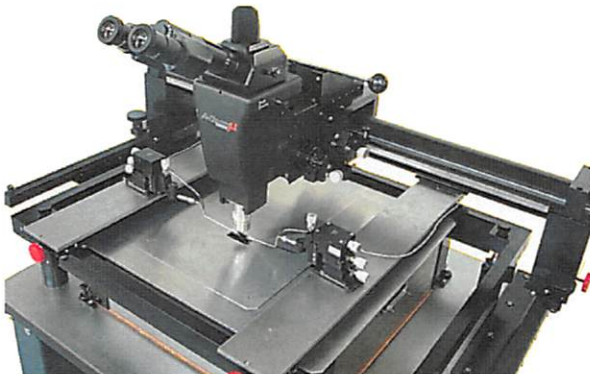
1555 Forrest Way, Carson City, NV 89706
775-882-2400 www.micromanipulator.com
Fax: 775-882-7694

Newsletter: February 2015

Micromanipulator is a proud sponsor of Mrs. Smith's 5th grade class at Fritsch Elementary School!

What's new?

We just produced another one of our new 2210 stations! These help test Kindles and I Pads even at different temperatures (from freezing at 0 degrees Celsius to near boiling at 85 degrees Celsius).

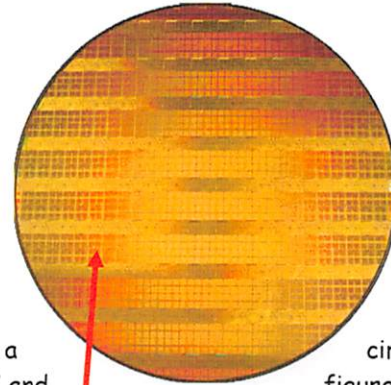


Our 2210 station!

Educational Stuff:

At Micromanipulator, we are writing new software. To do it we have to use:

English: We work with a lot of international customers. We just had a problem with a system in China and we had to describe how to fix it! We had to do it very carefully, with good sentence structure and careful step by step instructions. Our partners in China speak English well, but it is their "second" language!



Math:

to take a "wafer" and

figure out how many "square" circuits fit on it so our customers can "step" our probes from one circuit to the other to do tests that repeat over and over.

We have circle

figure out how

We also have to figure out how much our metal parts will expand over temperature so we can adjust for how they move our probe needles!

Art: We are going to a "Trade Show" in May in San Diego California! We have to produce posters and customer information to make the show a success by introducing our products to new customers!

These are just a few of the kinds of things we do at Micromanipulator!

We need new workers!

We need people to do electronics assembly at Micromanipulator! Our business is booming and we need to add more people to produce our products! This job needs someone who has learned electronics and who has good hand-eye coordination to put together products. They have to be able to solder (we can help teach them), and of course they have to be able to READ AND FOLLOW DIRECTIONS!

We are proud to sponsor your class. Keep studying and learning and supporting Mrs. Smith and remember you are always welcome at Micromanipulator!