Annual Scholarships Award Luncheon Held at the Club Lakeview - July 28, 2015

A group of Indiana College students were honored at the Annual Scholarship Award Luncheon held at the Club Lakeview, Naval Surface Warfare Center, Crane Division (NSWC Crane) on Tuesday, July 28, 2015. The Southern Indiana Section of the American Society of Naval Engineers (ASNE-SI), the Hoosier Hills Chapter of Federally Employed Women (FEW), and the NSWC Crane Chapter of Blacks in Government (BIG) hosted this event. Those in attendance included scholarship winners, their families, and several NSWC Crane employees.

The opening remarks were provided by Captain Jeffrey T. Elder, USN Commanding Officer, NSWC Crane. NSWC Crane Technical Director (TD) Dr. Adam Razavian was also present to congratulate and encourage the students. Both leaders appreciate the organization’s efforts to promote education through scholarship. They stress the importance of education in the surrounding counties, and collaborating more with the professional societies on education/training topics will help the community. Ms. Amber Graves, FEW Hoosier Hills Chapter President performed as Master of Ceremony for the event.

ASNE presenter Ms. Chelsea Harrison, ASNE Scholarship Committee Co-Chair, awarded five scholarships. ASNE’s purpose is to advance the knowledge and practice of naval engineering in public/private applications and operations and to promote naval engineering as a career field. ASNE is the leading professional engineering society for engineers, scientists, and allied professionals who conceive, design, develop, test, construct, outfit, operate, and maintain complex naval and maritime ships, submarines and aircraft, and their associated systems and subsystems. ASNE-SI also funds other Science & Engineering student activities related to education and growth throughout the year.

The three professional organizations awarded scholarships to 11 worthy beneficiaries, with scholarships totaling more than $8,000. The FEW, Hoosier Hills Chapter scholarship recipients included Julie Riggins, Olivia Crowe, Riley Callahan, Logan Tedrow and Elizabeth Day; the ASNE scholarship recipients included Elizabeth Nicole Woodruff, Luke R. Upton, Anna K. Cummings, and Eric David Hendrix. The BIG scholarship recipient was Morgan Newman. All of the awards winners of the three organizations are attending: Indiana University Purdue University of Indianapolis, Purdue University - West Lafayette, Taylor University, Indiana University-Bloomington, Vanderbilt University, Butler University, Rose-Hulman Institute of Technology, the University of Southern
Indiana, and University of Evansville. This luncheon is an annual reminder of the importance of the local professional organizations in supporting the growth and development of the Crane workforce.

ASNE Award Winners Bios:

**Elizabeth Nicole Woodruff**, daughter of Richard and Nelda Woodruff. A graduate of North Daviess Jr. Sr. High School, she is attending Indiana University Purdue University of Indianapolis to pursue a Bachelor's Degree in Mechanical Engineering. She participated in volleyball, tennis, student council, Beta Club and Fellowship of Christian Athletes. She also volunteered for NSWC Crane’s STEM after school program.

**Luke R. Upton**, son of Charles and Theresa Upton. Luke graduated from Jasper High School and is attending Purdue University - West Lafayette to pursue a Bachelor's Degree in Electrical Engineering. Luke participated in Key Club, National Honors Society, Business Professionals of America, Student Council, Purdue iGEM Genetic Engineering Team, Boy Scout Venture Crew (Eagle Scout), and is a member of St. John Basco youth ministry.

**Anna K. Cummings**, daughter of Bruce and Teresa Cummings. She graduated from Bedford North Lawrence High School and is attending Taylor University to pursue a Bachelor's Degree in Management Systems. Anna participated in Key Club, National Honors Society, Impact Club, Beta Club, Spanish Club, Choir Volunteers at the Special Olympics, Vacation Bible School, and the County Museum Children’s Program.

**Eric David Hendrix**, son of Tim and Melinda Hendrix. A graduate of Bloomfield High School, he is attending Indiana University to pursue a Bachelor's Degree in Biology. He is a member of the Bloomfield First Presbyterian Church, and IU Waterski Club.

**Madeline L. Dement**, daughter of John and Gina Dement. Madeline was homeschooled and is attending Indiana University Purdue University of Indianapolis to pursue a Bachelor's Degree in Mechanical Engineering. She Participates in Society of Women Engineers, IUPUI Honors College Scholar, and IUPUI Engineering and Technology Student Panel. She volunteers as a robotics team mentor, POWER (Women’s Engineering ) Camp Counselor, Women in Engineering Mentor, Race of Champions, and Academics for Civic Engagement, I Serve, Girl Scout Day.
ASNE- SI award recipients with NSWC, Commanding Officer CAPT JT. Elder & TD Dr. Adam Razavian
Onboarding New Hires (August 2015)

Row 1: Chris Hatfield, Keith Taylor, Brian Brinegar, Matt Settles, Jennifer Kinder, Gina Divine, Emily McCambridge and Chad Peachee
Row 2: Travis Shaffer, Richard Yukawa, Nicholas Selan, Shawn Howell, Bobbie Smith, Erin Wittmer, Jerry Bowman and Tyra Holt
Row 3: Orry Heffner, Tim Rue, Ryan Knepp, Nathan Helms, Mark Strange, Tammy Berger, Jason Covey, Patrick Bauer and Steve Mowery.
NEDO September Tour - Natural Resources
When - September 24th @ 1000
Where - Building 3245
This tour will cover the history and cultural resources, forest and natural resources management, and installation restoration programs at Naval Support Activity Crane. Displays include a historical timeline, maps, photos and taxidermy reflecting these programs.

NEDO Toastmasters Golf Scramble
When - September 25, 2015 @1130
Where - Eagle View Golf Course
NEDO and Toastmasters will host their first Mixed Golf Scramble! All proceeds from the event will be donated to a scholarship fund in honor of Captain LaSota. $40 per person ($160 a team). Contact norm.popkie@navy.mil or danielle.talbert@navy.mil.

NEDO Volunteer Event - Lotus Festival
When - September 24th-27th, 2015
Where - Bloomington
Please visit the below websites for more information:
Main page: http://lotusfest.org/
Volunteering info: http://lotusfest.org/volunteer-main/festival-volunteering-main/
Facebook page: https://www.facebook.com/LotusEducationAndArtsFoundation?fref=ts&ref=br_tf
The American Society of Naval Engineers, Southern Indiana Section (ASNE-SI) Naval Surface Warfare Center, Crane Division (NSWC Crane) was honored to host a visit for the new Executive Director of ASNE, Dr. Leigh McCue on September 3, 2015. She selected Southern Indiana section for her visit, and is the first Executive Director of ASNE to visit Crane. An agenda for her trip was composed by the public affairs office; she was greeted & escorted by Mr. Brad Secrest (Region IV Council Representative of ASNE) and Mr. Maroof Qurashi (ASNE-SI Chairman) throughout the stay.

NSWC, Crane familiarization and discussion tour started with a tour of Radar Systems Technologies in Bldg 3168. Mr. Brian Bailey, the Corporate Communications Lead provided briefings. The next stop was the Special Missions Focus Areas. Dr. McCue was provided a briefing at the “Maneuver & Engagement Technology Division” in Bldg 41. A tour was provided in Bldg 3330C of the Electronic Warfare Systems. This was briefed by Mr. Clint Seyer the Chief Strategist for Spectrum Department and Mr. Bailey. The last stop for her building tours was Bldg 3334 of the Flight Systems Division of the Global Deterrence & Defense Department. Mr. Brad Secrest provided a briefing.

After this information/capabilities loaded tours, Mr. Maroof Qurashi (ASNE-SI Chair) provided her details about the section activities and future plans. Mr. Secrest advises that other sections can follow Southern Indiana section example about payroll deductions for annual dues via a federal credit union.

A meeting with Mr. Benjamin Harkness, Global Deterrence & Defense Department Manager, took place as the final agenda item after this half day tour. The following few points were discussed in the meeting along with others:

- ASNE education outreach agenda expanding to cover: Navy-Army-Marines-Coastguards.
- ASNE-Southern Indiana Symposium to be held covering a broad view in the Navy with many tracks. The Symposium will include sponsorship with Indiana Office of Defense Development (IODD). The tentative date is spring 2017. Large participation is expected by Government, Academia and Industry from Indiana.

ASNE’s Strategic Plan reaffirms the founding purposes of the society and establishes as its priority the creation of a program of education, training, experience and mentorship. A key and enabling element of the plan is the investment in, and establishment, of venues that are particularly attractive to a younger generation of potential ASNE members and the emerging “virtual culture”. The plan also provides an additional four objectives which support the “education priority” and provide for the society's continued relevance and efficient operation.

In addition: A Professional & Technical organization like ASNE can build a communication bridge between core generations (estimated four) at the work place in understanding, creating harmony, mutual respect,
and joint effort.

From left to right: Mr. Brad Secrest (ASNE–Region IV Council Representative), Mr. Benjamin Harkness (Global Deterrence & Defense Department Manager), Dr. Leigh McCue (ASNE Executive Director and Secretary-Treasurer) & Mr. Maroof Qurashi (ASNE-SI Chairman),

Remy (Dr. McCue’s daughter) with ASNE-Southern Indiana Section cap on.
The American Society of Naval Engineers, Southern Indiana Section (ASNE-SI), Technical Exchange Meeting forum of the third quarter of 2015 was held on Thursday 10 September. The opening remarks came from the membership committee chair and master of ceremony (MO) Daniel Horstman. The following information contains some highlights of the presentations:

Ms. Lisa Oswald a Public Affairs Specialist at NSWC Crane presented “Millennial Communication: Understanding key differences between generations and how they communicate”. The talk covered the tendencies in millennials vs gen x and baby boomers, and correlated that to the technology/social norms present during each generation. In order for a workplace to thrive, successful communication must be present, and her goal is to bridge the always-present age gaps into one successful and cohesive work environment by simply recognizing these differences and understanding each other. Understanding differences is critical to creating harmony, mutual respect, and joint effort. This is a 21st Century Topic; it was well received by the attendees. Lisa is a subject matter expert in the field of technical communication, and most of her research has been in the field of Millennial Communication.

Ms. Rebecca C. Longstreth presented “Classification Using Backpropagation Pattern Recognitions from Neural Network Toolbox”. Backpropagation neural network is commonly used learning algorithms (pattern recognition or binary classification). Backpropagation works far faster than earlier approaches to learning, making it possible to use neural nets to solve problems which had previously been insoluble. It is capable of classifying high dimensional and large quantity data with variant format which exceeds that of the human brain. Backpropagation can be used for weapon steering, target tracking, sensors, data mining and image signal processing applications in defense industries. Rebecca is an Electrical Engineer and works in the Radar System Engineering branch of Radar Technologies Division. She graduated from the University of Hawaii, and has experience working in the Defense industry before joining Crane. Her knowledge of mathematical methods and Matlab coding has allowed her to find neural networking solutions in various applications.

Dr. Kiron Mateti a Scientist in the Electro-Optic Technology Division of code JXW provided information on “Bloomington South FIRST Robotics competition”. FIRST Robotics is an exciting, national robotics competition for elementary and high school students that encompasses many disciplines including mechanical, electrical, and computer engineering, but also business, marketing and management. Many NSWC Crane employees are involved as mentors and coaches, spanning a vast area across southern Indiana, however there is still demand for more participation. Any experience level is desired, whether it is building Legos or welding metal, simply making sure kids are on task and being a positive role model is the only requirement. Kiron will provide a detailed talk at the December Technical Exchange meeting.

Mr. Brad Secrest, the Chief Strategist for Strategic Missions provided briefing about the recent trip of ASNE Executive Director Dr. Leigh McCue. He talked about the possibility of an ASNE-Southern Indiana Symposium in 2017.
The program was attended by Mr. Zahid Din, Chief Engineer of NSWC, Crane, Ms. Pam Ingram, the Public Affairs Officer of NSWC, Crane and Ms. Cynthia Ice-Bones the Deputy EEO/Chief Diversity Officer along with a large number of Crane employees. Maroof (ASNE-SI Chair) stressed on ASNE’s founding purpose of the society and how employees can take advantage by becoming a member and participate in activities.

From left to right: Mr. Zahid Din (Corporate Chief Engineer), Mr. Daniel Horstman (ASNE-SI Member Chair), Ms. Lisa Oswald (Presenter PAO), Mr. Brad Secrest (ASNE–Region IV Council Representative), Mr. Maroof Qurashi (ASNE-SI Chairman), Ms. Rebecca C. Longstreth (presenter) and Dr. Kiron Mateti (not pictured)
Science and Engineering Networking Group Event

NSWC, Crane has several programs for young professionals including “Onboarding” for the new employees to get familiar with Crane environments and education. Crane has an organization known as New Employee Development Organization (NEDO) and there are other groups like “The Science and Engineering Networking Group” that meets once a month. The intent and goal of this monthly gathering is to foster relationships and networking, both professionally and socially, for recently hired scientists and engineers at Crane, student hires as well. This provides an excellent opportunity for new employees to meet other S&E’s at Crane in a relaxed social setting and to start to build relationships. For the August event the Science and Engineering Networking group had a pizza party sponsored by ASNE-SI. The party was held at Eagle Pointe Golf Resort in Bloomington. Ten new members joined ASNE as a result.
American Society of Naval Engineers  
Southern Indiana (ASNE-SI)

The American Society of Naval Engineers, Southern Indiana Section (ASNE-SI) proudly presents & cordially invites employees to a Distinguished Lecture by a special Navy Historian and Author John Laurence Busch Engineers Presentation on the First Crossing of the Atlantic Ocean by a Steamship, based upon his book 

Building the First “Steamship” in History

By

John Laurence Busch

Based upon his book

STEAM COFFIN
Captain Moses Rogers and the Steamship Savannah Break the Barrier

Historian and author John Laurence Busch will attempt to re-calibrate your mind before showing why the proposition of making the first crossing of the Atlantic Ocean on a "steamship" was met with a mixture of skepticism and fear. Then he will show how Captain Rogers addressed those fears, by designing a new kind of steam vessel, capable of overcoming the dangers of the deep.

When: October 14, 2015 at 11:30 to Noon
Where: B 3395, main conference room

The Savannah is more than a “steamship.” She is the first example of globalized high technology in history.

Praise for STEAM COFFIN:

“Busch’s supremely readable account… represents the creation of a long-needed missing piece of maritime history… It may properly be termed a page-turner, and is strongly recommended.”

— (mt) Marine Technology Magazine

“A beautifully written and engaging narrative… John Laurence Busch has made a major contribution to American maritime history with this fine book.”

— Naval War College Review

Contact Maroof Qurashi at maroof.qurashi@navy.mil or ext. 4230 for any questions
Building the First "Steamship" in History

Maroof Qurashi

In 1807, a brilliant, creative, and controversial American by the name of Robert Fulton declared his intent to build an experimental “steamboat,” which would be used to initiate a continuous passenger service between New York City and Albany, New York. With the success of his North River Steam Boat, Fulton showed that it was possible to use an artificial power to alter a person’s location and the amount of time it took to change it. In so doing, he also broke through the enormous psychological barrier that had existed in people’s minds; it was, in fact, possible to overcome nature to practical effect. It took time for many people to accept Robert Fulton’s triumph as the truth.

One man who did not need to be convinced was a sloop captain named Moses Rogers. He had witnessed the first successful runs of the North River Steam Boat to Albany, and the experience gave him the fever—steamboat fever.

Moses soon became one of the first steamboat captains in history, taking command of one of Fulton’s first rivals, the Phoenix. In his new profession, Moses learned not only the technicalities of this revolutionary invention, but the peculiarities of a traveling public just getting used to this new mode of transport.

In the years immediately following Fulton’s success, running these steamboats on rivers, lakes and bays became a normal and accepted part of American life. But taking such a vessel on a voyage across the ocean was a different proposition altogether. Experienced mariners didn’t think it could be done. These early steamboats, they declared, were just too flimsy and unwieldy to withstand the dangers of the deep. But Moses believed otherwise. Combining his knowledge of the old mode of transport (sail) with the new mode of transport (steam), he set out to design a vessel that was capable of overcoming the many dangers of the sea. This craft would not be a steamboat, but a "steamship," the first of its kind. She was named Savannah.

American Society of Naval Engineers Southern Indiana program committee has invited an independent historian John Laurence Busch who will do a presentation on 14 October at Crane and will show how Captain Rogers designed and built this revolutionary vessel...nearly two centuries ago! John focuses upon the interaction between humanity and technology, specializing in the first generation of steam-powered vessels. He has devoted years of research to discovering the true story of Captain Moses Rogers and the steamship Savannah.

The result is a book “STEAM COFFIN”, described by numerous book reviewers as the definitive account of what truly is America's sea saga. STEAM COFFIN has received positive book reviews from more than two dozen periodicals in the United States, Canada, the United Kingdom and Australia. John has made over 300 presentations on Captain Rogers and the Savannah to a wide variety of audiences, stretching from Maine to Puerto Rico to California, and across the Atlantic Ocean to Europe.
American Society for Quality (ASQ) 
Crane Formation Group, Hoosier Hills Section (ASQ-HH) & 
American Society of Naval Engineers – Southern Indiana 
Offer an Educational Lecture

“Should the US Model the German Education System”

By

Ms. Sue Smith

Executive Vice President Technology and Applied Sciences, Ivy Tech Community College

The American Society for Quality (ASQ) Crane Formation Group, Hoosier Hills Section (ASQ-HH) & American Society of Naval Engineers – Southern Indiana (ASNE-SI) in collaboration, cordially invite employees to an educational brown bag lunch lecture “Should the US Model the German Education System” presented by Ms. Sue Smith the Executive Vice President Technology and Applied Sciences, Ivy Tech Community College. Sue recently spent some time in Germany and studied the German Education System & compared it with the US Model. Ms. Smith has been with Ivy Tech Community College for over twenty years in the Workforce and Economic Development Division. She has served as Executive Director of Workforce and Economic Development at the Columbus Campus for many years and currently she is the statewide Corporate Executive for Technology and Applied Sciences.

Please join us on Thursday September 1st, at 1100, in B 3334 CR “D” for this important lecture series. Any questions please contact Maroof Qurashi at ext.4230 or email maroof.qurashi@navy.mil.
NSWC Crane successfully completed the In-Service Engineering Agent installation support for the MK-53 Decoy Launching System (DLS) Ordnance Alterations (ORDALT) onboard USS VICKSBURG (CG 69) in Mayport, Florida on Aug. 21 and USS DECATUR (DDG 92) in Everett, Washington on Aug. 28. The MK-53 ORDALT provides Electronic Warfare capability to US Naval Forces while conducting a variety of operations.

NSWC Crane personnel provided technical assistance for the AN/SLQ-32(V)4 Electronic Surveillance Enhancement (ESE) aboard USS GEORGE WASHINGTON (CVN 73) in Honolulu, Hawaii July 22-Aug. 10. NSWC Crane personnel investigated effects of Electromagnetic Interference (EMI) on ESE due to loss of Electronic Surveillance (ES) by capturing system faults during flight operations and noting the loss of ES at random times. After some investigation, cables and filters were replaced which improved ESE and SLA-10B system performance. The investigation results confirmed that EMI was not causing the intermittent loss of ES. In addition, the NSWC Crane personnel successfully provided technical assistance for the AN/SLQ-32(V)4 ESE aboard USS RONALD REAGAN (CVN 76) in Honolulu, Hawaii on Aug. 10-15.

NSWC Crane Radiation Sciences researchers completed a week of experiments at the Arnold Engineering Development Complex (AEDC) Space Threat Assessment Test bed (STAT) from Aug. 24-28 at the Arnold Air Force Base, TN. The STAT facility was developed to test satellite components in a realistic space environment and NSWC Crane researchers have been collaborating with the STAT team to explore the use of STAT for microelectronics testing. In this set of experiments, the STAT facility was used to test satellite components (flash memory components) giving them exposure to various space environments and radiation testing.

NSWC, Crane Golf Tournament Helps Ensure Successful Navy Ball for Warfighters, Team Crane Members the Naval Surface Warfare Center, Crane Division (NSWC Crane) Navy Ball Committee hosted its inaugural Navy Ball Golf Tournament on Wednesday, Aug. 26.

NSWC, Crane and Fallbrook Employees Gather for Special Tribute to 9/11
Friday, Sept. 11 marked the 14th anniversary of the attacks that shook the nation and directly impacted NSWC Crane employees--not just as American citizens, but because of the nature of their work. Crane employees gathered at Building 1 to observe the morning colors for a special tribute to 9/11 and to remember the fallen. Fallbrook employees also participated by visiting the display and ceremony at the World Memorial, 9/11 Memorial Tribute Exhibit at Vince Ross Village Square.

Naval Surface Warfare Center (NSWC) Commander RDML Loren Selby visited Naval Surface Warfare Center, Crane Division (NSWC Crane) the week of 8 September, along with NSWC Chief of Staff CAPT Randell Dykes. Selby and Dykes met with NSWC Crane’s Executive Leadership Team (ELT) for discussions on Selby’s interest areas and NSWC Crane’s areas of responsibility, mission focus areas and Integrated Command Strategy. The guests also toured the Strategic Missions Center, Electronic Warfare and the Special Missions Center, enjoying a live fire demonstration at the outdoor range.
NSWC Crane Helps Prepare Bloomfield Students for STEM Careers. During the week of 8 September,

Naval Surface Warfare Center, Crane Division (NSWC Crane) has partnered with the Direct Employers Foundation, Bloomfield Jr. /Sr. High School and Indiana University’s Center for P-16 Research and Collaboration to put personnel into the classroom as part of a total immersion project designed to bring the naval installation into the school system. It will immerse kids in a corporate environment while augmenting their Science, Technology, Engineering and Mathematics (STEM) education.

NSWC Crane Employee Recognized for Upgrading Ship Self-Defense Capability. A Naval Surface Warfare Center, Crane Division (NSWC Crane) Applied Science and Demand Management Department employee has been named a Program Executive Office Integrated Warfare Systems IWS (PEO IWS) 2.0 award winner. John Jones, who serves as PEO IWS 2E5’s installation and asset manager, recently received notification that he was selected to receive the PEO IWS 2.0 2nd Quarter Excellence Award for efforts that were instrumental to bringing improved Electronic Warfare capability to the fleet.

Source: NSWC Crane Public Affairs, COMNAVSEA All Hands, Early Bird
Strategic Thinking for the 21st Century

Talent Development Professional

By

Carrie Van Daele

The National Cancer Institute successfully used strategic thinking to innovate: It switched its focus from finding a cure to seeking a neutralizer for the enzyme that causes cancer. What are you doing to spur your strategic thinking in talent development?

Let’s take a look at an organization known for innovation: Google. How does it apply its innovation to talent development? First, it uses a lifestyle strategy to hire and keep top talent. The company sells potential employees on fun at work, not high salaries and generous vacation policies. A free cafeteria, all-you-can-eat buffets, dog-friendly offices, and quirky seating also attract the attention of high performers. What’s more, Google also provides their engineers with time to work on innovative and creative side projects—yielding sustainability for Google annually.

To apply strategic thinking to talent development, you must possess four key competencies. These competencies will give you the capability to think innovatively and turn your most trivial job responsibility into an exceptional opportunity for your company’s sustainability—just like Google does.

1. Discipline your mind like an entrepreneur.
2. Discipline your mind like a market leader.
3. Discipline your mind like a kindergartner.
4. Discipline your mind like an explorer.

**Competency #1: Discipline Your Mind like an Entrepreneur**

You must consistently search for ideas and manipulate your knowledge and experience. Case in point: Edwin Land invented the Polaroid camera because his young daughter, on a walk in the woods, asked him why she could not immediately see the pictures he took.

Strategically create probabilities out of possibilities by looking for a multitude of potential answers to any problem or challenge. Have fun with problems and play with ideas. Take deliberate breaks from regular work. Encourage feedback from a variety of sources in your idea journal.

Try this exercise to see how it works: Imagine an umbrella and consider the following questions:
1. What else can it be used for?
2. What could be used instead of an umbrella?

3. How could the umbrella be modified for a new use?

**Competency #2: Discipline Your Mind like a Market Leader**

You must build a superior thinking style using analogy to create a comparison between one event or item and something else that has similar elements. Here’s an example of how this sort of thinking works: “Life is like a grapefruit. Just as you start to enjoy it, it squirts you in the eye.” Life and a grapefruit is the comparison. Now apply this to your own work. Strategically reinvent your economic environment, marketplace, or image of your role by pinning up pictures, notes, and cartoons on a wall you regularly see. This will trigger your mind to incubate ideas and shape solutions to challenges you face.

**Competency #3: Discipline Your Mind like a Kindergartner**

If you see a large dot on a whiteboard, how would you answer this question: “What is that?” Kindergartners would not say “a dot” because they look for lots of possible right and wrong answers. The rules may not be challenged by you because you are locked into one method, approach, and even strategy. Avoid such thinking as:

- “We tried it before.”
- “It would take too much time.”
- “It’s not my job.”
- “That’s not how we do it here.”

**Competency #4: Discipline Your Mind like an Explorer**

You must pay attention to your inner voice. Consider the following story: “The president of a large restaurant chain headquartered in Vancouver, British Columbia, flabbergasted his staff when he made a decision to build a restaurant in a rundown warehouse area. Two years later the new restaurant was the chain’s top moneymaker and the neighborhood around it was revitalized.”

In essence, this is using both sides of your brain:

- logically define the problem [left brain]
- generate possibilities and change your wording [right brain].

For example, pose the question “What opening can we use here?” rather than “What door can we use here?” The word “door” influences your thinking.

Finally, do not limit yourself to your own expertise. For example, schedule “exploring time” into your work day or week to read magazines relevant to areas outside your specialty.

**Applying Function Analysis:**

Organization strategic thinking means creating deliberate innovative change. A function analysis can help you systematically challenge the tasks of a job or steps in a process with an eye toward elimination or simplification. Here are the steps to conducting a function analysis:

Step 1 - Select a job/process to be analyzed.
Step 2 – List the activities/steps of the job/process.
Step 3 – List the time and or cost of the activities/steps.
Step 4 – Select an activity for analysis (high cost or time).
Step 5 – Challenge the reason for the activity/step. Consider the question: What would happen if we did not do this activity/step?
Step 6 – Decide if elimination is possible:
Step 7 – If elimination is not possible, can the activity/process/step be simplified?
• Can we do it another way? How?
• Can we do it less frequently? How?
• Can we combine it with another task? How?
• Can someone else do it? Who?
• Can we do it another time? When?
• Does duplication exist? Where?
• What step(s) in the process might be a cause of the problem?

Step 8 – Select the best idea(s) for simplifying the activity/step. (This is strategic thinking that innovates.)

Step 9 – Outline the job improvement proposal and benefits of new methods, including:

• cost benefits
• safety benefits
• quality benefits
• employee benefits
• customer benefits.

Step 10 – Obtain approval and support and implement the changes.

Carrie Van Daele

Carrie Van Daele is the President and CEO of Van Daele & Associates Inc. She also is the author of 50 One-Minute Tips for Trainers, published by LogicalOperations.
How Insecure Leaders Can Sabotage Productivity

By Emily Stone

Of all the annoyances the workday can entail — that too-early alarm, rush hour traffic, late nights stuck at your desk on deadline — having a bad boss can be the most insidious. “Nobody wants to go to work when they don’t get along with their boss,” says Jon Maner, a professor of management and organizations at the Kellogg School. “It really weighs on people’s everyday life.”

Maner has studied bad bosses, with the goal of understanding their behavior so that it can be curtailed. He has focused in particular on power-hungry bosses who are surprisingly willing to sideline their best performing employees — and promote incompetent team members — in order to keep themselves from being outshined.

“Top performers are really, really valuable members of the group,” Maner says. “These are the people who are often innovating, they’re creating, they’re pushing the organization forward. That can make power-hungry bosses nervous because these are the people who are probably the most able to take over some of their power.”

And, of course, bad bosses are not simply unpleasant for employees. They also can be disastrous for the entire organization. James Shein, a clinical professor of strategy at the Kellogg School, has seen power-hungry bosses ruin company after company. This is particularly true when a company is failing and the CEO needs to change course to salvage the organization. “A sitting CEO has a very difficult time making changes because, to them, it often means, ‘I must have done something wrong previously,’” Shein says. This is when a board needs to step in to find a new leader. “If you don’t push them out they often will just keep driving the company down into the dirt,” he says.

You can hear more from Maner and Shein in the following transcript of in Person podcast.

Jon Maner: There’s nothing worse than having a bad boss. It makes your time in the office really painful. It makes getting up in the morning tough.
Kellogg Insight: That’s Jon Maner of the Kellogg School. If what he just said raised your blood pressure by reminding you of your own boss, we’re sorry. But you’re not alone. Maner says he gets emails from strangers who hear about his research into bad bosses, and tell him that he just described their own manager perfectly. While bad bosses come in all flavors, Maner, a professor of management and organizations, has researched a particular type: one who craves power above all else.

Maner: Power hungry bosses are willing to do a lot of things that are pretty crazy, as it turns out.

Kellogg Insight: In his research, Maner has found that leaders who are motivated by power will try to isolate and undermine their top performing workers in an effort not to be overshadowed by them.

Maner: For example, rather than having people work together who like each other and get along really well, they actually pair together people who don’t like each other and are unlikely to get along mainly because that prevents these very skilled workers from generating alliances or close friendships with others. That makes them feel ganged up on, makes them feel threatened.

Kellogg Insight: What is especially astonishing is that these toxic dynamics emerge when research participants are simply assigned to be a boss for the purpose of an experiment. Here is some more bad boss behavior:

Maner: Power hungry bosses are more inclined to promote into roles of influence relatively unskilled members of the organization and to actually demote the most skilled members of the organization. Again it’s sort of like they’re trying to keep these very, potentially very visible, talented people under their thumb.

We’ve also done studies showing that power hungry leaders tend to hoard information. This is obviously bad for the organization, but it’s good for the power hungry boss who wants to keep his or her power.

Kellogg Insight: While Maner’s research was conducted in a lab, this phenomenon very much exists in the real world. One good place to find power-hungry bosses? Failing companies. James Shein, a clinical professor of strategy at the Kellogg School, has studied lots of bosses making bad decisions, particularly in turn-around situations.

James Shein: About five sixths of the time a company fails it’s due to the hubris or ego of the CEO, who refuses to listen. The power is more important than the decision as to recognizing that they need to change.

Kellogg Insight: One bad boss he’s studied — and this is a guy who kicked his own siblings and kids out of the family business to shore up his power— was the CEO of a giant Brazilian retailer (apologies in advance to our Portuguese-speaking listeners for my pronunciation), called Companhia Brasileira de Distribuição, whose flagship chain is Pão de Açucar. The CEO, Abilio dos Santos Diniz, signed an agreement in 2005 with the giant French firm Casino. The agreement gave Casino a 50% stake in a holding company that owned both companies. Diniz would be in charge of this holding company – at first. But he had to cede control of the holding company after seven years. But guess what? When the transfer of ownership was approaching, Diniz decided didn’t want to give up control.

Shein: Diniz didn’t want to step back, that’s giving up power. So he secretly cut a deal with the CEO of Carrefour, a rival of Casino’s, to cut a whole new deal in a very complex structure that would dilute Casino’s ownership of the combined companies, and of course leave him as the CEO of this new triumvirate.
Kellogg Insight: Long international showdown story short: this power play failed when word of the possible merger was leaked to the press. Casino ended up in control of Companhia Brasileira de Distribuição after all. And Diniz was eventually shown the door, albeit a lucrative door. Sound bytes from people we talked to in downtown Evanston: “We were located in the basement of the headquarters building. There were no windows. There was no light. Anytime we gave any type of recommendation as to how things could be made better we were just blocked. We were really treated pretty disrespectfully.”  “What made him a bad boss was his inability to ever admit he was wrong about something. It was awful for morale. It was really hard. It created an environment where people felt really closed and didn’t want to take chances.” “I ignore her. That’s my coping strategy. It’s terrible, though. You know, it doesn’t make me feel good about responding to her that way, and yet I don’t know any other way to do it, and I shut down.”

Maner: People encounter these kinds of bad bosses all the time in their own workplace.

Kellogg Insight: That’s John Maner again.

Maner: This is one of the overarching goals of our work, to really gain insight into these very commonplace instances of bad leadership so that we can then turn around and try to combat them.
Kellogg Insight: Yes! We agree. Let’s combat bad bosses. But how? One important strategy to is to push for more accountability and transparency among managers. Maner says leaders should know that their decisions will be public and that they’ll be judged, in part, by how well their team members are performing. But take care not to go too far. Feeling vulnerable can increase a power-hungry boss’ troublesome behavior. Maner suggests ensuring that bosses don’t feel like their jobs are at risk every moment of every day.

Maner: Surely over the long term you have to hold leaders accountable, but where I think the train can run off the tracks is when leaders feel like any day now they might lose their jobs and that’s where I think leaders really become worried about other people outshining them.

Kellogg Insight: Another strategy is simply to hire better bosses in the first place. Maner’s research looks at the differences between leaders who are motivated by power versus those who are motivated by prestige, meaning they want people to like and respect them. What our work suggests is that people with a real thirst for respect and admiration are probably going to be better bosses than people with a real desire for power and control and authority. That often means, ironically, picking people who don’t crave power. I think there’s a natural selection by us. When people really want power they do whatever they can to rise through the hierarchy. Ironically those aren’t necessarily the best people for the job.

Kellogg Insight: This is important to keep in mind if you’re hiring someone to lead a team in your company.

Maner: When you’re interviewing people for particular jobs really try to get a sense of what drives people and what motivates them. Is it power and authority and control over resources on the one hand or is it respect and admiration on the other hand.

Kellogg Insight: Still, before we malign power-hungry bosses too much, (and admittedly, that’s what we’ve just been doing) it is important to recognize that power-hungry leaders have their place.

Maner: For example, if there’s an organization that needs to make a unified decision very quickly, there’s no time for all of the members of the organization to deliberate and for it to be a democratic process, a dominance-oriented leader is what you need in that situation because they’re going to make a call and
Kellogg Insight: For Shein, the key to turning a boss’ thirst for power into a force for good is to make sure it’s tempered with a bit of humility. This is a hard combination to find.

Shein: One of the things we often find with powerful bosses, is to always believe whatever they’ve done now and in the recent past must be good because, “I did it.” And what we find is those are the kind of people that have to go. In other words, a sitting CEO has a very difficult time making changes because to them it often means, “I must’ve done something wrong previously.”

Kellogg Insight: That’s where the humility needs to come in.

Shein: The best turn-around CEO are ones that go in, listen to everybody, very quickly get everyone’s opinion, then makes a decision: “We’re going to take that hill.” And people who didn’t agree with that decision will start saying things and the CEO will very quickly say, “This is not a democracy. I’ve made this decision.”

But the best leaders are ones who are powerful enough to do that, but to realize if they were headed for the wrong hill, they’re the ones who will say, “Wrong hill, here’s why I think I was wrong, and what we’ve learned tells us to go in this direction.”

Kellogg Insight: So does Shein, who has studied bad bosses in many guises, have a bad boss story of his own? We had to ask. And the answer was yes, with no names revealed to protect the not-so-innocent.

Shein: Once I was designated as his heir apparent, by the CEO, next thing I know I was given assignments in areas outside of headquarters because it was a threat to him.

Kellogg Insight: A threat to Shein’s boss, that is, a manager who worked under the CEO.

Shein: It even showed itself on the social side with an annual get together of executives with wives, I was talking with the CEO, he approached me to talk, and my boss’ wife quickly came over and asked the CEO to dance so he wouldn’t continue to be talking directly to me.

Source: Excellence in Gov.
Finally, and perhaps most important, often we get asked the question, "What's in it for me?" when we ask employees to join ASNE. The historical answer has revolved around networking opportunities and the opportunity for technical interchange. While those are certainly true and good reasons for joining, they are not perhaps the most important. One of our members put it very succinctly recently when he said, "It's not about you, it's about Crane". What that means is that we as ASNE can do things for Crane that we as Crane cannot. Vibrant and active professional societies are important to the future of Crane. We are able to leverage our resources to get Crane visibility and recognition. Think of the symposium, the luncheons, the distinguished lecturers; we target individuals for those events who we want to visit Crane. We are continually working with Corporate Communications, Command, and the Departments to target individuals for symposium and luncheon speakers; our goal is to get those individuals who can influence our national advocacy in the Focus Areas here for a visit. We continually work to enhance the reputation of Crane in our outreach efforts to local communities. The next time you're recruiting a new member and they ask why then should join, explain to them the importance of supporting the work we do.

Why ASNE?

The Purpose of ASNE is to:

- advance the knowledge and practice of naval engineering in public and private applications and operations,
- enhance the professionalism and well-being of members, and
- promote naval engineering as a career field.

NAVAL ENGINEERING includes all arts and sciences as applied in the research, development, design, construction, operation, maintenance and logistic support of surface and subsurface ships and marine craft, naval maritime auxiliaries, ship related aviation and space systems, combat systems, command control, electronics and ordnance systems, ocean structures and fixed and mobile shore facilities which are used by the naval and other military forces and civilian maritime organizations for the defense and well-being of the Nation.