

The Communicator



GRAPHIC
COMMUNICATIONS
EDUCATION
ASSOCIATION

FORMERLY KNOWN AS IGAEA

The Graphic Communications Education Association (GCEA), formerly known as IGAEA, is an association of educators in partnership with industry, dedicated to sharing theories, principles, techniques, and processes relating to graphic communication and imaging technologies.



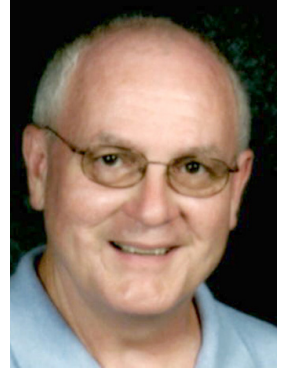
Find this and previous issues of the Communicator at

GCEAONLINE.ORG

Message from the President

Networking Old and New!

After spending the first five or six years of my career in my classroom I met a fellow graphic arts teacher who would become one of my closest friends. He asked me if I expected to spend my career just working with my students, within my classroom. He pointed out that I might find it useful to attend workshops, seminars, and conferences sponsored by industry and education related organizations, that no matter how successful I felt I was in my classroom, I could be learning and doing more to the benefit of my students. He gave me a list of industry and education groups to join and I joined them all. After 36 GCEA/IGAEA conferences, over 30 Print Shows, dozens of seminars, regional and international industry conferences, I can tell you unequivocally he was right. Many of my closest friends are fellow graphics teachers and industry reps that I might only meet once or twice a year. But I always came away with new ideas, projects, background on new technology and software that I could use immediately in my classroom. This networking continues next summer at our 92nd conference at Ryerson University in Toronto, Canada [July 16-20, 2017](#). Consider this a personal invitation from me to join us. If you need help meeting new friends, find me and we will meet them together, it will be fun and educational.



It is my hope that you and your new friends will continue networking long after the conference, using the social networking that is available today. It's so much easier and more enjoyable to create new projects with the help of others with the same passion to be successful as yourself. Over 10 years ago five of us meet once a week for an hour, handing out assignments and home work and put together a webquest on pre-flighting. Using today's technology and your network will make your career a much more successful and rewarding one.

Curriculum that works, PrintED!

Visit: www.gaerf.org

Thirty years ago a group of teachers and industry representatives came together and designed an accreditation program that contain 9 different areas and almost 700 competencies. Every five years since then they have continued to meet and update. Today we have over 500 competencies and 6 accreditation areas.

- Advertising Design
- Digital File Preparation/Digital File Output
- Digital Production Printing
- Graphic Communications
- Offset Press Operations/Bindery & Finishing
- Screen Printing

President's Letter Continued on the next page

To become a nationally accredited program you must teach at least 85% of the competencies within at least two of the accreditation areas, one of which must be Graphic Communications. It is required because it contains information about the majority of the graphic communications industry, including employability skills and math. The other five areas were designed to fit the background of the instructor and the equipment in the individual programs. I have been involved with PrintED for over 25 years. I accredited both the Technical Center and the high school where I ended my career. I believed in this curriculum because it gave me the flexibility to allow my students to work beyond the required competencies, each student working at their own pace. Every five years PrintED asked me for my input on updating competencies and the national assessments and every five years it forced me to look at what and how I was teaching. The curriculum must work. During my twenty plus years of involvement with SkillsUSA my students won 12 state gold medals and 8 national medals, the last five of which were gold. More about SkillsUSA in my next message.

Things I discovered that worked well during my 40 years in the classroom:

1. Make each student feel you really care about WHO they are! Each Fall I interviewed each student to help them set goals for the year. The goals should always be about what interests them and their needs! Get them thinking about college and careers! The careers might not always be about graphics, that's OK, it should always be about THEM! If they are interested in graphics that's the icing on the cake! Note: if you interview, take notes on each student and what you promise to help them with and always follow up with them! Never let them down by not following through on a promise.
2. Recruiting - the students in your class will be your best and most successful method for keeping your numbers at a level that will keep you working. It is the only method of recruiting I used during my career and I never had an under-enrolled class in 40 years. Your knowledge of the subject matter and ability to make each student feel important will be keys to your success. Always find the time to listen when your students need to speak to you, it may not always be about graphics, but it will be important to them.

More of these to follow in my next message.

Things that you might find useful:

Gareth David Graphic Design 40+ YouTube videos

<https://www.youtube.com/watch?v=d5ZbjSUku44>

20 Graphic Designers to Watch On YouTube:

<http://www.howdesign.com/resources-education/20-graphic-designers-to-watch-on-youtube/>

Looking for Historical Newspapers: Samples from the late 1700's. Samples of letterpress handset type pre 1880's, first linotype newspapers late 1880's to late 1960's. A very cool site just to visit! Stephen Goldman has over 40,000 newspapers!

www.historicalnews.com

Sincerely,

Mike Stinnett, GCEA President

2017 GCEA Conference Update

GCEA Conference 2017 YouTube Video Posted

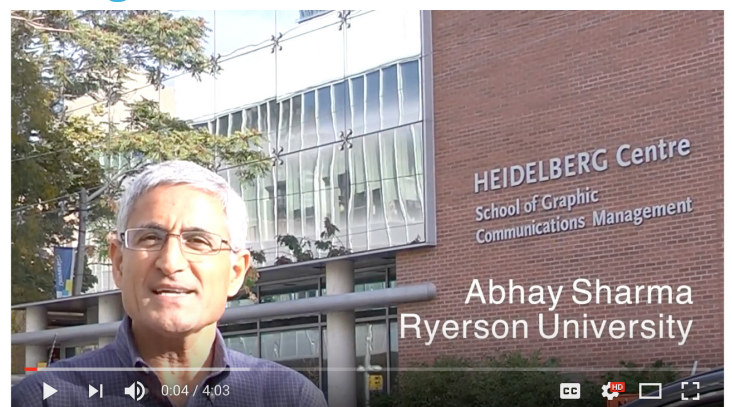
Planning is underway for the GCEA Conference, [July 16-20, 2017](#) in Toronto, Canada. Dr Abhay Sharma in the School of Graphic Communications Management, Ryerson University is putting together the program and accommodation arrangements for next summer. Check out a YouTube preview on the conference website.

Every summer, educators from high schools, community colleges and universities meet over three days for workshops, demonstrations, and seminars in emerging areas of the graphic arts. Attendees focus on developing ideas for new projects that can be used in the classroom. Topics in areas of technology and pedagogy are explored. Do you have an idea or project that you would like to share? All proposals will be carefully considered by the program committee.

The theme of the conference in 2017 is Women in Print. Gender equity is being sought today in all areas of society from US Women's Soccer team to the BBC 100 Women - a list of inspirational and influential women in the world. Gender equity in the printing industry has been identified by SGIA's Women in Print Alliance, and the Girls who Print program enjoyed great exposure at Graph Expo. In order to reflect the majority women students in our classrooms, we seek to engage with more women role models at GCEA 2017.

A trip to Canada is not complete without a visit to Niagara Falls, so pack your plastic poncho and passport. Toronto is 2.5 hours drive from Buffalo, and also has an international airport flying direct to all major US cities. Accommodation will be on-campus in student dormitories with an option for normal hotel-style rooms. Enjoy the strong US\$ in Canada's largest city.

Save the date, and visit our website to sign up to receive e-mail updates - www.gceatoronto.com.



View the above video at <https://youtu.be/u-hxYwBLsbM>

Position Openings

California Polytechnic University

GRAPHIC COMMUNICATION – Assistant Professor, Full-Time, Academic Year, Tenure Track in the College of Liberal Arts at California Polytechnic State University, San Luis Obispo, California, beginning September 15, 2017. Salary is commensurate with qualifications and experience. Teaching assignment may include courses in one or more of the following areas: web design and production, mobile app design, user interface and user experience design and production.

Candidate selected will be responsible for creative lecture and laboratory teaching approaches that include current and emerging technologies to enhance student education and for participating in scholarly practices such as research, conference presentations, and grant development that lead to publication or its equivalent. The successful candidate will also be expected to pursue a systematic program of professional development, curricular improvement, and to participate in service activities including committee service, student advising, and building industry relationships.

Cal Poly operates on a teacher-scholar model in which faculty are expected to be excellent teachers, to produce scholarship in their field of interest, and provide service to the institution. The typical teaching assignment is twelve units per quarter.

REQUIREMENTS: Master's degree in Graphic Communication or a closely related field, and industry experience is required. PhD preferred. Proven experience in web technologies (HTML, CSS, etc.), Axure, InVision, Balsamiq or Adobe XD UI/UX prototyping applications valuable. Experience with JavaScript, JQuery or PHP is valuable.

Additionally, the candidate should have expertise in contemporary design practices that include foundation theory and practice including typography, color theory and a solid understanding of traditional print processes and work flows.

ABOUT THE DEPARTMENT: The Graphic Communication Department is the leading four-year university program in printing and publishing in the U.S. Ours is a learn-by-doing program with over 30,000 square feet of laboratories containing all major printing technologies. The department celebrated its 70th year in 2016.

The successful candidate will join eight full-time faculty and 350 undergraduate students. The department's website is grc.calpoly.edu.

TO APPLY: Interested applicants should complete the online faculty application at <http://WWW.CALPOLYJOBS.ORG> and submit it to Requisition #104278. Please upload the following required materials as part of the electronic application: cover letter, current vitae, transcript copy, teaching portfolio and evidence of teaching effectiveness (with course syllabi and evaluations), and an example(s) of scholarship or creative work.

Applicants must also be prepared to provide the names and email addresses for a minimum of three professional references when completing the online application. Cal Poly will directly solicit

letters from the individuals listed by applicants. Official sealed transcripts will be required prior to appointment.

REVIEW BEGIN DATE: Review of applications will begin **January 9, 2017** and continue until the position is filled.

At California Polytechnic State University, San Luis Obispo, we believe that cultivating an environment that embraces and promotes diversity is fundamental to the success of our students, our employees and our community. Bringing people together from different backgrounds, experiences and value systems fosters the innovative and creative thinking that exemplifies Cal Poly's values of free inquiry, cultural and intellectual diversity, mutual respect, civic engagement, and social and environmental responsibility.

Cal Poly's commitment to diversity informs our efforts in recruitment, hiring and retention. California Polytechnic State University is an affirmative action/equal opportunity employer.

ABOUT THE COLLEGE OF LIBERAL ARTS: California Polytechnic State University is a comprehensive polytechnic university with a strong commitment to its Learn by Doing philosophy. The College of Liberal Arts offers 17 highly selective Bachelors degree programs and five Master's degree programs with 250 full-time faculty and nearly 3,000 undergraduate majors. Our faculty are engaged in teaching, scholarship, and service. Cal Poly is among the most selective universities in the nation; student quality is high, with applications significantly exceeding admissions.

Hinsdale Central High School - Opening

Anticipated Opening Technology Education SY17-18

Qualifications / Skills:

- Qualifying candidates should have experience in traditional and digital B&W and color photography. Candidates also with knowledge of Architecture and/or Engineering design/drafting preferred.
- Knowledge of Graphic Communications a plus.
- Fluency with Adobe Photoshop and AutoCAD required.
- Working knowledge of Adobe CC and AutoDesk products desirable.
- Excellent communications skills and a collaborative approach to working within a team desirable.

Hinsdale Central High School is consistently ranked as one of the top public high schools in Illinois and the nation. The Technology Education Department at Central features a vibrant and student-centered curriculum that prepares students for post-secondary opportunities in the fields of Engineering and Architectural Design, Graphic Communications, and Photography. Please contact Mike Cousineau mcousine@hinsdale86.org with any questions. See the position at <http://www.generalasp.com/D86/onlineapp/jobpostings/view.asp>

LaSalle Peru High School - Opening

Opening starting 2017-18 school year.

LaSalle-Peru Area Career Center/
LaSalle-Peru Twp. H.S.

200 Ninth St.
Peru, IL 61354

Attn: ACC Director Dwayne Mentgen

Full time position Graphic Communications instructor

High School level

Submitted by Deb Parisot DDPARISOT@LPHS.NET

Purdue University Northwest - Opening

Position: Assistant Professor of Computer Graphics Technology

The Computer Information Technology and Graphics Department in the College of Technology seeks applicants for an academic year tenure-track faculty position, beginning in the Fall of 2017. The faculty member will be expected to teach courses in the areas of Design for Visualization & Communication, Internet Foundation, Geometric Modeling for Visualization & Communication, Principles of Interactive and Dynamic Media, Web Programming, Advanced Web Programming, and Advanced Graphic Design for Web and Multimedia; and conduct research in the area of Computer Graphics Technology. Opportunities are available to collaborate in research, teaching, and engagement with faculty members across all colleges in the University.

Qualifications/Requirements

All applicants shall have a doctoral degree in Computer Graphics Technology, or a related field. The degree must be earned by the start date of August 14, 2017. Individuals with a strong portfolio that reflects knowledge and experience in computer graphics and digital media, especially with 2D/3D graphic design background, are strongly encouraged to apply.

Applications

Send ALL of the following materials to CGT Search Committee Chair, Department of Computer Information Technology and Graphics, Purdue University Northwest, Anderson 145, 2200 169th Street, Hammond, IN 46323, cgt@pnw.edu: curriculum vita, unofficial transcripts, description of future research goals and teaching interests, names and contact information for three references. Application review will begin after [November 4, 2016](#) and continue until the position is filled.

Competitions and Scholarships

Gutenberg Competition

The annual Gutenberg Awards are coming up and we will be looking for your entries for print, layout, photography, and Website design soon. If you have never entered your student's work in the Gutenberg Awards this year might be a great year to start. If you have entered student's work in the past you already know how great it is for a student to receive an award. Certificates for last year's winners will be mailing out after the winter break.

The Gutenberg Awards will once again use an online entry system.

All entries, even if they are mailed in, need to be registered online. You will also need to be a current member of GCEA and have created a login for the website before you can enter your student submissions. Simply follow this link to find out more information and to enter your student's project details:

www.gceaonline.org/student-resources/student-contests/gutenberg-award/

Please note you will still mail in your student's Gutenberg "print" and film photography entries by printing out your registration form and attaching it to each of your entries. The online registration system will help cut down on any errors and allow certificates to be printed more efficiently. Please double check your student entries for spelling errors. All submissions must be completed by [June 1, 2017](#). Remember there is also a 15-entry limit per current GCEA member.



The Gutenberg print entries for 2016 were quite varied and we are looking for your best student work in screen-printing, offset, flexo, gravure and digital. We are also looking for your best layout and design projects. Keep in mind there are quite a few print categories to choose from so most likely you have student projects that would be great as Gutenberg entries. We really want you to be a part of the Gutenberg Awards.

The Gutenberg Photography entries for 2016 showed a wide range of photographic talent from students in high school, technical programs, and at university. This year our most popular category was digitally altered where students showed off their Photoshop skills. Next year we are adding a new category to the competition-Film Photography! So if your students are processing film, be sure to submit to this category. Going forward we hope to streamline entry to encourage more submissions, so all digital photography should only be submitted online (no prints necessary). Thought printed darkroom photos will have to be entered online and then mailed in just like the print entries. Please encourage your students to submit to the photography division so we can recognize the fantastic work of our instructors and the talent of our students.

The Gutenberg Website entries are also expanding to two categories.

1. The first will be "Website Design": Websites entered in this category can be generated with software that enables creation without coding. Student website entries will be judged on their "design" only and will be evaluated for content quality, page layout, typography, color scheme, use of graphic images, and navigation.
2. The second Website category will be "Website Development": Web sites entered in this category will be developed using a combination of software and coding.

MEMBERSHIP FORM

MEMBERSHIP FORM



Any/all software application used must be identified with the entry. If interactive components are used, specify if they were generated by the student or if a third-party plug-in or extension was used. Student web site entries will be judged on their “design” (content quality, page layout, typography, color scheme, use of graphic images, and navigation) and their “development” (factors like: load time and validity of the code generated).

Be sure to check out all of the Gutenberg Award information on the GCEA website. It is a great opportunity for you and your students to get recognition for the great work you are doing at your school. Updated forms will be available soon, but feel free to look at last year’s forms for more information.

For further information please contact Charles Weiss at ctweiss@clemsun.edu.

Graphic Communications Week Contest

The annual Graphic Communications Week Poster Design contest is now accepting submissions. The poster must be designed for Graphic Communications Week which typically revolves around Benjamin Franklin’s birthday (January 17). The theme could encompass anything that symbolizes the power and importance of printed communications. Students from any secondary or post-secondary school are eligible. This year the method of submitting the entries has changed to an electronic submission.

Work must be submitted through a current GCEA Member by [July 1, 2017](#). Visit: www.gceaonline.org/student-resources/student-contests/graphic-communications-week-poster-design-contest/

For further information please contact Harold Halliday at hhallida@Central.UH.EDU

SGIA Scholarship

Supported by generous donations from endowment investors and industry leaders, the SGIA Scholarship Program will award \$2,000 to ten student recipients. Applicants will complete a rigorous application process, and scholarship winners will be carefully selected by members of the SGIA Education Committee.

Student applicants are reviewed based on their scholastic achievement, application essay, participation in extracurricular activities, achievements and work experience, and academic and professional recommendations. They must be a student of an active SGIA Educational Institution Member and committed to pursuing a career within the growing imaging community.

The 2017 SGIA Scholarship application is now available! Please mail one copy of your application to SGIA Headquarters by [April 14, 2017](#). Find out more information at <https://www.sgia.org/resource/other/sgia-scholarship-application>

If you have any questions, contact Erin Nuss erin@sgia.org, SGIA’s Associate Manager of Education.

PGSF Scholarship

Applicants must be pursuing a career in printing technology, printing management, publishing or graphic communications.

Applicant must also be enrolled in a printing or graphics program at a technical school, college, or university within the United States.

Find out more information at <https://pgsf.org/pgsf-scholarship-application/>. Deadline to apply is [March 1, 2017](#).

IGCSP Scholarship

Illinois Graphic Communications Scholarship

Program (IGCSP) is a consortium of scholarships aimed at supporting high potential college-bound people seeking a career in the graphic communications industry.

- The applicant must be a resident of Illinois.
- The applicant must be enrolled or enrolling as a declared major in a college level technology, production, and/or management-oriented graphics program (such as graphic arts technology, graphic communications, or graphics technology).
- The scholarship can be used for any college program in the country that meets the program requirements.
- Any scholarship funds received will be sent directly to the financial aid office of the attending college for use in tuition, fees, and/or college-based lodging.

Find out more information at <http://www.igcsp.com>. Deadline to apply is [March 3, 2017](#).

EDSF Scholarship

EDSF’s scholarship program enables students to receive the education necessary to pursue careers in the document management and graphic communications industry, while providing much needed assistance in offsetting the ever increasing financial burden.

The scholarships are awarded based on scholastic achievement, honors received, participation in school activities and community service and organizational affiliations. Find out more information at http://www.edsf.org/what_we_do/scholarships/apply.html

Deadline to apply is [May 1, 2017](#).

Other News

Three GCEA Awards Renamed to Recognize Three Long-time Members

Changes to the names of the Earl I. Sundeen Award, the Fred J. Hartman Award, and the Frederick D. Kagy Lifetime Achievement Award were announced by President Thomas Loch at this year’s GCEA Annual Conference Banquet.

The name changes were made by the GCEA Board to recognize the work of long-time members Jack Simich, Erv Dennis, and Zeke Prust—all who have made major contributions to the GCEA and who have also been previous recipients of at least two of these prestigious awards (Jack Simich was awarded all three).

Beginning in 2017, the new names for these awards will be:

- The Sundeen/Simich Industry Support Award,
- The Hartman/Dennis Service to Education Award, and
- The Kagy/Prust Life Achievement Award.

The criteria for each of these prestigious awards will remain unchanged, but will now carry the legacy of additional outstanding leaders from our organization.

Visual Communications Journal Seeking Authors

Consider writing an article for publication in the Visual Communications Journal (VCJ). Articles that describe a technologies, processes, or curricular activities are central to the purpose of the journal as a means to communicate and improve graphic communications education. Please consider sharing your innovative projects and expertise with your colleagues through this important publication resource.

Check out all of the recent VCJ publications on our website: <http://gceaonline.org/publications/visual-communications-journal/>

Contact Dan Wilson, VCJ Editor, for any questions at dgwilso@ilstu.edu.

Call for Project Exchange Submissions

Do you have a teaching method that works? Do you have a project that students find to be engaging? Submit it to the GCEA Project Exchange at www.gceaonline.org. Login to gceaonline.org and submit a project through the Project Exchange link at the top of the page. Please submit projects to Project Exchange! If you have any questions about format, contact Can Le at chle3@Central.UH.EDU.

L.E.A.D Conference

Submitted by Laura Roberts

Mattoon High School SkillsUSA went to the LEAD conference on November 10, 2016. The conference was held in Tinley Park, IL. SkillsUSA Illinois Chapter Leaders went to this conference to better their leadership skills. This year's training focused on teaching more trust, compassion, stability, and hope between SkillsUSA members. Students went to build their skills in partnerships, seize opportunities to get involved, create a marketable image, managing their reputation, and balance personal and professional success. L.E.A.D helped maximize strengths and talents, develop and set goals, discover leadership characteristics, work as a team, improve communication skills, and interview with business and industry.

Everyone in our group that went participated in a contest. For T-Shirt Design: Gavin Prior won 1st place. For Pin Design: Sadie



LEAD Participants from Mattoon High School.
Photo submitted by Laura Roberts.

Willaredt won 1st place. For Customer Service: Beth Blake won 2nd place. For the opening and closing ceremonies: Brittany Schwanke won 2nd place. For Prepare Speech: Savannah Monterusso won 3rd place. Out of the nine people that went, four people earned the Statesman Award. To win the Statesman Award, you have to answer 17 questions and get it signed by an advisor or a state officer. The winners of the Statesman award are Beth Blake, Autumn Peadro, Gavin Prior, and Brittany Schwanke. The winners will receive a certificate and a Statesman Award pin.

Check out <https://www.youtube.com/watch?v=MjXYWp3T-Ns&feature=youtu.be> for an overview of the L.E.A.D Conference. Learn. Educate. Act. Dream!

Drupa 2016: What happens in Düsseldorf, does not stay in Düsseldorf

Touch the Future—Educational Opportunities for University Graphic Communications Degree Programs

Submitted by Dr. John Craft

Keywords: drupa, digital inkjet technology, digital enhancement presses, disruptive print technology

There is an expression in the United States, “What happens in Vegas, stays in Vegas”. Mark E. Brown, former vice president of The Howard Hughes Corporation came up this expression as an advertising campaign to promote the level of entertainment one can expect when going to Las Vegas, Nevada for a pleasurable trip.

However, the excitement that occurs every four years in Düsseldorf as vendors introduce new improvements to print and cross media technology is worth sharing with the world. Although there were many innovative digital technologies presented at drupa 2016 between May 31 and June 10, this article addresses three distinctive technological trends worth following:

1. Digital enhancement presses
2. Advances in high-speed digital inkjet technology
3. Disruptive print technology

The digital imaging process connects with each of these technologies causing a philosophical change or paradigm shift in the perception of print media production. Quality and speed are promises kept by the new generation of digital inkjet press models making this technology a viable replacement for offset lithography for the printing of labels and packages.

1. Summary of drupa 2016

Since 1951, drupa has continued to attract visitors and buyers to its massive display of innovation from more than 1,837 exhibitors based in 54 countries. This year's theme was “Touch the Future”, which offered visitors technologies that go beyond print [1].

Düsseldorf (also know as “Drupa City”) carried on the tradition of hosting drupa at the Messe (fairgrounds, north of the city along the

peaceful flowing Rhine River). Even though “Touch the Future” was this year’s theme at drupa, the overall feeling was that the tradeshow goers were a global print family (as represented by the conference attendee’s Twitter hashtag– #globalprintfamily). One could easily see this on the convention floor: during the 11 days of drupa, the common language of print and cross media production technology was spoken among 260,000 visitors from 188 countries.



Professor Holger Zellmer, Leipzig University of Applied Sciences and Professor Wolfgang Faigle of the Hochschule der Medien of Stuttgart, Germany projects on display in Halle 7a as part of the Education Exhibit. Photo submitted by Dr. John Craft

Although advances in printing technologies were presented at drupa 2016, other technological areas such as 3D printing, functional printing, packaging production, multichannel workflows, and green printing also gained the attention of visitors.

Vital to the future of the printing industry is the support of graphics media education to prepare students for jobs involving production technologies or leadership roles in keeping companies efficient in a highly competitive business.

Halle 7a was the site of Campus Avenue, where any visitors saw the educational efforts of Germany’s leading print media schools. Sophisticated and innovative student produced print products that showcased the ingenuity of Germany’s future graphics media leaders were on display. High quality student projects, such as booklets, brochures, and grand format printed images, grabbed the attention of tradeshow visitors.

2. Digital Enhancement Presses

When you arrive at the Messe Düsseldorf, you feel the urge to go for the exhibits of the “big dogs” or print industry giants such as Heidelberg or Koenig & Bauer AG; but on your way, you see something from a not too familiar company that gushes with innovation and hooks you into their exhibit.

That was the case with Scodix, an Israel based digital printing and embossing manufacturing company is gaining recognition with their digital enhancement presses. Scodix, a little known company (to me that is) made a strong impression with their digital enhancement presses. Although this company has been around since 2007, the digital product technology on display at their booth captured the interest of those willing to watch live demonstrations of digital embossing—a product line that they are credited with inventing. By the end of the 11 days of drupa, it was reported in the June 10 issue of the drupa daily that Scodix sold more than a 100 machines [2].

Live demonstrations were given on the Scodix E106 digital enhancement press that uses fixed array inkjet technology along with a folding carton converter as one of its inline production functions. It is single all-in-one production workflow with the technological capability of emulating conventional screen-printing, embossing, flat varnish screen-printing effects, and cold foil stamp effects.

The revolutionary capabilities of the Scodix E106 are unique to many of the digital printing presses on display at drupa. The excitement increased as inline digital embossing enhanced the printed image.

From the storm caused by the introduction and inclusion of digital printing technology for printing companies, the capability of digital embossing is a new feature that is designed to revolutionize the enhancement process in the printing industry.

Digital embossing is appealing as a production workflow since there is no harm to any living organisms, such as humans, animals, or plants. This environmentally friendly technology does not require printing plates and solvents. Moreover, it does not consume much energy compared to other printing technologies such as offset lithography, flexography, or gravure.

It offers on-demand print volume options that include the production of a single print to high volume print quantities in the thousands thus maintaining a consistent cost per copy. The Scodix E106 is capable of printing in resolution of 600 X 1250 dots per inches.

It can print a variety of substrates that include offset, digital, plastics, laminated and coated materials. The range of paper weights it is capable of printing ranges from 135 to 700 gsm. Paper size ranges from a minimum of 707mm X 500mm to a maximum sheet size of 1060mm X 760mm. The maximum image size is 1040mm X 750mm.

Additionally for productivity, it can print up to 4000 B1 press sheet size (41 inches/ 1,050 millimeters press sheet size) sheets per hour[2].

The Scodix E106 has dimensions of 10.2 meters (33feet 5.6 inches) length X 6 Meters (19 feet 8.22 inches) wide X 4 meters (13 feet 1.4 inches) height; and weighs 10.4 tons. Although this press would occupy a sizable footprint in commercial printing plants or print service provider businesses, the diverse production capabilities of this digital enhancement press offers a viable option for replacing conventional screen printing processes [2].



A Scodix representative fine tunes the highly impressive E106 Digital Enhancement Press.

Photo submitted by Dr. John Craft



Press Operators monitoring the progress of printing from the Landa Operator Cockpit. This control center features an inspection table, touch screen controls, counter, and utility drawers.

Photo submitted by Dr. John Craft

Digital embossing requires an additional black separation in order to make the embossing effect possible. Accuracy is achieved by registering each sheet optically before printing to emboss complex shapes. Careful preparation that involves two levels of raised images. The design includes compensation for a Low and High Lifts.

Low lift is a digital embossing effect producing more texture for complex shapes. It is an environmentally friendly process with a high degree of accurate registration.

High Lift is a Digital Embossing option that produces a raised surface that rivals the quality of non digital embossing process. It involves a spot UV varnish that embosses the printed job but with perfect registration and without the matching, deep deboss on the reverse of the sheet below the embossing.

3. Advances in digital high speed inkjet printing: Landa Nanographic Printing

Benny Landa announced on the 9th of May, 2012 to “standing room only” audience of curious visitors that a new line of digital presses using nanographic ink technology would be manufactured by his company. Since that time, refinements to the Nanographic printing technology has improved with in performance forging new partnerships with leading commercial print companies such as Quad/Graphics. That the new line of presses would be introduced into the market by the 4th Quarter of 2013. The excitement generated by his dramatic announcement attracted many people to attend the Landa theatre, where fully booked shows revealed the potential of this new technology.

Landa asserts with a sense of pride that the S10P Nanographic Printing Press prints with widest gamut beyond most existing digital presses on all off-the-shelf substrates without having to pretreat.

Benny Landa described the Landa Nanoink colorants, “the process can create ultra- sharp dots of extremely high uniformity, high gloss fidelity, and the broadest color gamut of any four-color printing process. The NanoInk film image instantaneously bonds to the surface of any off-the-shelf stock, forming a tough, abrasion-resistant laminated layer without leaving any residual ink on the blanket. Since images are already dry, there is no need for post drying.”

Given Benny Landa’s success with the digital print technology, he created the Landa Corporation after selling the Indigo Digital Printing Press to Hewlett-Packard in 2001. Moreover, at drupa, Kodak also had the Prosper Press, which also uses the Nanographic ink technology.

Disruptive Technology

Why choose Disruptive as your Printers?

Essentially because you’ll save valuable time, money & energy and can apply your savings elsewhere in your business.

Because we understand design & print “inside out”, we know how to select ideal processes, optimise specifications, efficiently organise orders and engineer costs to your best advantage.

Our experts will analyse your external print portfolio to identify where costs can be reduced, where efficiencies can be gained and where quality and value can be enhanced. We will agree to do as much of the “difficult” work as you want us to, and want nothing that you prefer to keep in-house. Then we’ll expertly manage every detail of the entire design and print process for you; quite literally from initial artwork to final archive.

<http://www.disruptive-printing.co.uk/>

“What is Disruptive Printing?”

Based on the disruptive business model, which is used to “improve products or services”, disruptive printing is a strategy that serves the preferences of the customer.

that is more in ways that the market neither demands, nor expects, but which rapidly become recognised as the preferred consumer choice.

Disruptive Printing combines an extensive range of professional design & print services under one roof to deliver a “stressless” print order experience that saves our customers considerable time, money & effort.

Whether you need a business card or billboard, 1 or 1 million units, a one-off order or weekly delivery; our specialist teams will personally manage your order from start to finish and ensure your delivery is always on time, on cost and on quality.

Sounds very simple and it really can be. Call us now to discuss your needs and experience Disruptive Printing for yourself.

Part of the Computing fundamentals glossary:

A disruptive technology is one that displaces an established technology and shakes up the industry or a ground-breaking product that creates a completely new industry.

Here are a few examples of disruptive technologies:

- The personal computer (PC) displaced the typewriter and forever changed the way we work and communicate.
- The Windows operating system’s combination of affordability and a user- friendly interface was instrumental in the rapid development of the personal computing industry in the 1990s. Personal computing disrupted the television industry, as well as a great number of other activities.
- Email transformed the way we communicating, largely displacing letter- writing and disrupting the postal and greeting card industries.
- Cell phones made it possible for people to call us anywhere and disrupted the telecom industry.
- The laptop computer and mobile computing made a mobile workforce possible and made it possible for people to connect to corporate networks and collaborate from anywhere. In many

organizations, laptops replaced desktops.

- Smartphones largely replaced cell phones and PDAs and, because of the available apps, also disrupted: pocket cameras, MP3 players, calculators and GPS devices, among many other possibilities. For some mobile users, smartphones often replace laptops. Others prefer a tablet.
- Cloud computing has been a hugely disruptive technology in the business world, displacing many resources that would conventionally have been located in-house or provided as a traditionally hosted service.
- Social networking has had a major impact on the way we communicate and – especially for personal use – disrupting telephone, email, instant messaging and event planning.

Harvard Business School professor Clayton M. Christensen coined the term disruptive technology. In his 1997 best-selling book, “The Innovator’s Dilemma,” Christensen separates new technology into two categories: sustaining and disruptive. Sustaining technology relies on incremental improvements to an already established technology. Disruptive technology lacks refinement, often has performance problems because it is new, appeals to a limited audience, and may not yet have a proven practical application. (Such was the case with Alexander Graham Bell’s “electrical speech machine,” which we now call the telephone.)



A Kodak sales representative showing a potential customer the latest continues Kodak inkjet Stream technology.
Photo submitted by Dr. John Craft



A Kodak Rep reaches for one of the packaging examples on display at Kodak’s STREETBOX.
Photo submitted by Dr. John Craft



Prof. Dr. Helmut Wittenzellner and a student from the Hochschule der Medien of Stuttgart show work produced by students in their printing labs.
Photo submitted by Dr. John Craft

In his book, Christensen points out that large corporations are designed to work with sustaining technologies. They excel at knowing their market, staying close to their customers, and having a mechanism in place to develop existing technology. Conversely, they have trouble capitalizing on the potential efficiencies, cost-savings, or new marketing opportunities created by low-margin disruptive technologies. Using real-world examples to illustrate his point, Christensen demonstrates how it is not unusual for a big corporation to dismiss the value of a disruptive technology because it does not reinforce current company goals, only to be blindsided as the technology matures, gains a larger audience and market share and threatens the status quo.

“I’m in for the long haul”, I overheard Frank Romano say as he was asked how long he planned to be at drupa. It was a great honor to sit at the same table as Frank, Anastassio Politis, and the guy from Australia discussed their technological finds during their day at the trade show.

A massive display at the Kodak Quarter (Hall 5, Stand F09) featured a convenient-store themed booth called the STREETBOX. Each of packaging products on the shelves was printed using Kodak’s digital inkjet technology. The display of these real products gave visitors an opportunity to examine high print quality by pulling products off the shelf. This gave potentially new customers an idea of printing excellence Kodak achieved by showcasing actual printed products existing customers along side the technology used to print the packages. Kodak introduced a new generation of their inkjet technology— Utliratream—that produces a high-resolution printer that optimizes the accurate placement of ink at while printing at high speed.

Visitors to drupa visiting the Kodak Quarter saw live demonstrations of the Kodak Prosper 6000C Press. Kodak provided a stylish shoulder bag that became a “must have” item among trade show attendees. Their “Print. For Good.” Campaign effectively attracted many to see the high quality inkjet printing in action. The bright yellow display became a beacon to those seeking a unique method of digital printing technology.

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