Editor's Note: Remembering Roxana Moreno

Daniel Robinson

Published online: 11 November 2010
© Springer Science+Business Media, LLC 2010

This past summer, we lost a mover and shaker in the field of educational psychology when Roxana Moreno passed away. Although Roxana left us at a relatively young age and early in her career—she received her Ph.D. in 1999, she left her mark with an impressive list of scholarly contributions and by influencing the people with whom she had worked. This editor's note includes comments from those who were close to her.

I first met Roxana in Seattle during the AERA meeting in 2001 when we were touring Bill Winn's lab at the University of Washington. We truly became friends only recently when we worked together in our roles as program chair for Division C of AERA (she in 2009 and me in 2010). Roxana and her husband, Dante, visited Austin, Texas in October 2009 and she presented her research program to our faculty and students. I confess that I actively tried to persuade her to join our faculty. I knew her to be immensely productive, a great mentor to graduate students and junior faculty, an excellent teacher, and a true colleague.

*Dan Robinson, Editor
Educational Psychology Review*

It is still difficult for me to come to terms with the fact that Roxana Moreno passed away this summer. Roxana and I had been friends and collaborators since we met just over 10 years ago, when she joined UNM the same summer that I left New Mexico for New York. What sometimes helps me cope with her loss is that she was one of the most passionate persons I have known, that she embraced life with the intent to make the most of it, both professionally and in her private life, and that, as a result, she truly lived life to the fullest. Roxana has been recognized as one of the most productive scholars in her field, yet

D. Robinson (✉)
Department of Educational Psychology, The University of Texas at Austin, 1 University Station, D5800
Austin, TX 78712-0383, USA
e-mail: dan.robinson@mail.utexas.edu

she also managed to actively pursue her many interests, from arts and crafts to saving bunnies and to off-road motorcycling.

Roxana has received many awards and recognitions in her relatively short career as cognitive and educational psychologist. What described her best, however, was her strong sense of academic rigor and integrity. Roxana held a degree in economics, a law degree, studied artificial intelligence and computer programming, and held a Ph.D. in Cognitive Psychology. This rare combination of experience gave her a unique perspective that allowed her to evaluate the merits of research in multimedia learning, one of her primary research areas, from a theoretical, practical, and technical perspective. I experienced this first-hand in our collaboration, with Roland Brünken, editing *Cognitive Load Theory*, a volume published in 2010 by Cambridge University Press. With her input, we implemented a very involved review process for the 12 chapters of the book that was aimed at assuring the coherence and quality of the individual contributions. Although some authors were not used to this level of editing, and although this editing process and the resulting revisions delayed the publication of the book, I believe that rigor of this editing process was justified by the resulting strength of the chapters by all contributing authors.

I will miss Roxana, her friendship, her intellectual curiosity and commitment to high-quality research and scholarship, and, last but not least, her vivacious personality. The memory of her professionalism and love of life will continue to inspire me.

Jan L. Plass, Professor

*Director, CREATE, Co-Director, Games for Learning Institute
New York University*

Dr. Roxana Moreno exemplified the “complete professor.” She lived life to the fullest and created a healthy balance between her professional life and her personal life. It is a lesson that all of us could learn, and profit, from in our own lives. My fondest memory of her is the summer of 2009, just after we had taught our courses at the University of Cadiz, in Cadiz, Spain. We had all taken the ferry across the bay to a picturesque little town called,

Puerto de Santa Maria, a sleepy little fishing village. Letting our hair down, or at least those of us that still had hair, we engaged in a very long Spanish lunch that lasted for hours. We waxed eloquent on the changes to Spanish education that were taking place, and for which our expertise was appreciated. We talked about families, and children, and bunnies—for which Roxana was famous as a savior of abused rabbits. There was laughter and wine and delicious seafood all set in an outdoor restaurant called Romerijo. In those moments, the passionate attachment for a life well lived was in evidence, and her laughter and joy at the jokes and stories was infectious. Little did I know that just 1 year after this, she would be gone.

I know that she would want all of us to replace our grief with the same passionate zeal that she had in her life. There is no way that she would want us to linger on what we miss, but rather on what we are going to do to make our own lives meaningful. If we truly want to honor her memory, then we will go forward aggressively into our own futures with every bit of energy we have—and live life to the fullest.

*Dick Howell, Dean
College of Education
University of New Mexico*

Roxana was always in motion, or so it seemed to me. She must have loved movement—by car, air, motorcycle, and foot. Traveling from one site to another, she made an impact on everyone she met. Students and colleagues alike were captivated by her dedication to psychological science, a passion she enacted at the office, in the classroom and laboratory, and far beyond the borders of New Mexico. I wish we had found more time to talk, to explore the spaces between her professional world and my own. There are questions I wish I had been able to ask her: about growing up Argentinean, about her view of the academic world and its growing demands, about the little things colleagues never learn about one another in the swirl of obligations and commitments that constitute contemporary academic life.

*Jan Armstrong
Associate Professor of Educational Psychology
University of New Mexico*

As a doctoral student at the University of Nebraska, I was already reading Roxana's published work. Although she was only 1 year ahead of me in graduating, her work was well known. When I interviewed at the University of New Mexico, breakfast with Roxana sealed the deal. In person, she was funny and energetic beyond belief, and as a colleague she was an amazing artist and researcher. Having an office down the hall from Roxana was like working near a tornado. Her enthusiasm for teaching and passion for research helped create an environment that made coming to work a joy.

We worked as a team. The Educational Psychology faculty at UNM worked together on grant supported research, each person taking a piece of the project. This collaboration kept us in close contact with one another and gave us common goals. It was this type of professional interaction that Roxana initiated and supported. I believe she envisioned a research team that included all members of the EdPsy faculty and graduate students. The excitement, and learning, taking place in our building were contagious. I credit Roxana with instigating this research frenzy.

Roxana and I spoke so many times about our mutual goal of mentoring doctoral students who would become competent researchers and leaders in the field. We attended conferences together, especially AERA and SCIEP, and loved to take our students with us to the parties in the evenings after a day of paper and poster sessions. We rode the carousel in San Diego, explored the French Quarter in New Orleans, and ate seafood in Seattle. I will miss Roxana especially at conferences.

But, I am a better person for having known her, and certainly a more skilled professional for having learned from her. Her work will continue to influence the field of educational psychology for years to come. And, her smile and laughter will live in my heart forever.

Terri L. Flowerday

Associate Professor of Educational Psychology

University of New Mexico

While her academic accomplishments are remarkable, Roxana as a colleague and friend was even more impressive. I first met Roxana while interviewing at the University of New Mexico in 2005. I was in the midst of completing my dissertation and, as others may have experienced or will experience, I was very nervous during my job interview. To top this nervousness off, Roxana was a very energetic individual, a model of physical fitness and health. In graduate school, I had little reason to dress formally and the week before my interview I bought a new pair of dress shoes, not an uncommon story, I hear. Unfortunately, the shoes fit poorly and by the time my campus tour was to occur I had horrible blisters on both feet. Roxana played the tour guide and she proceeded to run me all over campus; bounding up stairs, skipping down stairs, dancing around the duck pond, and jogging across the fields. All the while, I was saying to myself “ouch, ouch” and fearing that she would think I was severely out of shape. Eventually, I fell so far behind I had to confess my predicament. She was very gracious and informed me that the same thing had happened on her job search. A few years later, I heard that this event was memorable for her and she liked my confession. Fortunately, I was hired by the University of New Mexico and was able to enjoy being a colleague and friend of Roxana’s.

Everywhere Roxana went she cultivated strong collaborative relationships; an aspect of her professional identity that is evident if one reviews her curriculum vitae. She was the master of recruiting peers and students to work on projects with her. She did not seem to care whether her collaborators were early, middle or late career. As long as one was willing to do the work, she wanted to collaborate. Immediately upon my arrival at UNM Roxana asked if I would like to collaborate on a project. We had several successful projects together. While working on these projects Roxana was generous with her knowledge and resources. Never once did I feel that I was a junior researcher. We would meet often and have brainstorming sessions. In these sessions one had to be quick. Roxana could generate a dozen or more testable hypotheses in an hour. Each hypothesis would be tied to prior theory and empirical findings. These meetings were simply amazing!! I will be surprised if I ever meet someone in the field with this ability again.

In a very short period of time, Roxana had become a giant in educational psychology. Her research agenda and productivity were astonishing. Her knowledge base was second to none. In academia she was one of a kind. Most important of all, she was a great person, wonderful colleague and good friend who took time to contribute to the lives of others in positive ways. She was beautiful, caring, energetic and full of life. I am shocked that she was taken from us all at such a young age. I have found myself wondering what other exciting things she would have accomplished if she had been given more years in this world. I console myself with the thought that she accomplished more in her short life than most will ever accomplish given a longer life. I also count my blessings that I was among the many that were fortunate enough to know her for a brief period of time. May she rest in peace.

Scott C. Marley

Assistant Professor of Educational Psychology

University of New Mexico

Torrential rain (not typical weather for Albuquerque in March) was falling the day that Roxana Moreno interviewed for an Assistant Professor position at the University of New Mexico. I related to her that it snowed during my own interview 2 years previously and that people kept telling me it wasn't typical Albuquerque weather. However, in my first year on the faculty, no matter what the weather seemed to be, someone would say to me, "This isn't typical Albuquerque weather," so that I was convinced there was no such thing. We dashed from building to building as I escorted her to her next appointment. We met the professor she was to see next, and, as we were shaking the rain off and I was making introductions, he said, "Sorry about the rain. This isn't typical Albuquerque weather." We looked at each other and both laughed out loud!

That is my first real recollection of Roxana Moreno, and, as it turns out, it is allegorical. Albuquerque weather is paradoxical. On the one hand, residents always say things like, "If you don't like the weather, wait 10 min." and "This isn't typical Albuquerque weather." On the other hand, Albuquerque actually touts a fairly stable weather pattern that really is rather predictable and wonderful even as it moves through four complete seasons. Most of the days are sunny and very pleasant.

In the 10 years that Roxana was my colleague, she was similarly paradoxical. She was in and out of her office often it seemed, and we were never quite sure which part of the country or the globe she was off to next. It always seemed like there was another project, another grant, another paper, another award. She seemed to be in constant motion, ever-changing. Yet, throughout it all, she was incredibly stable: typically Roxana. She was vibrant and active—always. She was very bright and creative—always. She was ambitious and demanding—always.

I miss her often. I miss her drive and determination. I miss her intelligence. And from now on, during those rainy spring days, I will hear her laughter mixed in with the thunder, as I did on that day we met, and be a little more creative, a little more determined, a little more ambitious in homage to her.

She was just like the lightening that figured so prominently in many of her experiments, and that we saw plenty of that March day: she was the brilliant flash that faded much too quickly briefly illuminating all around her. Far from typical, but typically Roxana.

Jay Parkes

Associate Professor of Educational Psychology

Chair, Department of Individual, Family, and Community Education

Since beginning graduate school, I have worked with Dr. Roxana Moreno on several of her research grants, and she was also my advisor, dissertation chair, mentor, and friend. Roxana was a highly engaged and committed advisor, and working with her on research has been one of the greatest highlights of my graduate school career.

When I first started working with Roxana, my job was to travel around New Mexico to elementary and middle schools, proctoring questionnaires and tests in the classroom. Shortly after this initial introduction to collecting research, I started working in the educational psychology research lab under Roxana's direction. In the lab, Roxana involved her students in all aspects of the data collection, scoring and analyzing, and reporting. She gave us each responsibility for projects that matched our interests and our skills, and she let us control, under her guidance, many aspects of the projects. She also encouraged us to design and conduct our own research. The environment that she created allowed me to take intellectual risks, stretch my imagination, and grow my curiosity.

Her deep knowledge, her enthusiasm, and her supportive nature made being mentored by Roxana an unparalleled experience. Aside from her encyclopedic

knowledge of the field, Roxana had the skill of truly listening. She could listen to a kernel of an idea for a project and, with a word or two, point me exactly to the right body of literature to help the idea bloom. Roxana had an inestimable influence on my thinking—more than I will understand for many years to come. The more I learn, the better I am able to recognize the immense creative vision behind much of the research I worked on with Roxana.

Her creativity is probably what I will remember about Roxana best. She always reminded me that the best work comes out of pursuing projects that are intrinsically interesting—projects that make you feel on fire—and she encouraged me to pursue questions that excited me rather than following popular trends. She loved to write, and she told me that she would sometimes wake in the night needing to write down her ideas. This sort of creative passion drove many aspects of her life. In addition to being an educational researcher, Roxana was also an incredible creative artist working through diverse media including dance, fabric arts, painting and crafts. On many occasions, I would walk into her office and admire a tapestry that she wove or a picture that she painted. We shared an interest in arts and crafts, and she always encouraged me to continue pursuing my interest in ceramics even when I felt too busy with personal and professional responsibilities.

I had imagined that Roxana would be with me through the dissertation writing process, that she would hood me at graduation, and that someday I would contact her to collaborate on a study, to ask her advice about teaching, or to ask her for guidance on writing a grant proposal. I am sorry that I will never have these opportunities, and that I won't be able to share in the joy of researching with Roxana not as her student but as a colleague. I feel blessed to have worked with her for so many years, and to have gotten the benefit of her immense knowledge and charisma. I am deeply saddened by her death, and will hold her memory in my heart and cherish the wisdom that she shared with me and all those with whom she worked.

Sara Abercrombie

Educational Psychology Ph.D. Candidate

Dr. Moreno's Research Assistant and Doctoral Advisee

Dr. Roxana Moreno's life and legacy is an inspiration to scholars, educational psychologists, and to women.

I had the honor of being her student, research assistant, and mentee. The person in my mind that is "Roxana" is really bigger than life. Fortunately, she will live on, not only in her amazing written contributions to educational research but through the many people she touched through researching, teaching, and mentoring.

I will be forever changed by her enduring optimism and energy. She lived as though there were never too many projects to be working on (or thinking about working on!) at one time. This positive energy can lead students to get quite a bit accomplished! Yes, when I think of her work ethic, I think of sports teams in training saying, go, go, go! However, that was only part of her.

Dr. Moreno was very generous with the time she gave to her students. She was always thinking about her students and how to help them succeed. She was fair and matter of fact. If you needed an honest answer about something, she was the person to go to. She was also an excellent teacher who made teaching seem effortless.

She was a rare combination of brilliant driven scientist, poised mentor, and loving, supportive friend. She had comfortableness about her, a calmness and present-mindedness that allowed her to flow from intense scientific discourse in the office at one moment to an

easy (and fun!) lunch at Yanni's the next. I will miss that the most. We all loved her, it was impossible not to!

Janna Biazak

Dr. Moreno's Research Assistant and Masters Advisee

I first heard of Roxana 4 years ago as I entered the Educational Psychology doctoral program at the University of New Mexico. To me at first, she was simply a name, a murmur in the wind, and an author of much of the research I found myself reading. Then a year later, I had the opportunity to meet Roxana face to face for the first time. I had been asked to be a part of her cognition lab, I remember sitting across from her discussing the issues of the lab and my current project. I was tasked with conducting follow-up classroom observations on student teachers who had participated in an earlier study. Roxana expressed the importance of this project and how crucial it was that we, as researchers, begin to exam how our research variables play out in actual classrooms. This meeting solidified my image of Roxana; no longer was she simply a name, but a person genuinely attempting to move the field of education psychology forward. I was struck by the passion she had for her research and remember leaving the meeting with a feeling of having just entered into something larger than myself, a feeling of progress and hope for the field of education psychology.

Roxana Moreno, was a role model for me, not only in the ways that she conducted her research but also in the way she valued the many perspectives of education. She inspired me, by challenging me not to simply accept common educational theory as true, but to delve into the evidence supporting educational theories. Roxana's energy and creativity was endless and I am thankful and honored to have had the opportunity to learn from such an influential figure in our field.

Kira Carbonneau

Educational Psychology Ph.D. Candidate

Dr. Moreno's Research Assistant

In many ways, Roxana reminded me of the Pied Piper from Hamelin. Roxana brought all of her research assistants along with excitement and dedication to excellence in research. "There is a journal and home for all quality research, though sometimes we have to look hard to find it," was a common saying around her labs. Try as we might to keep up, we tended to be four pages behind her fast paced mind and ideas.

But as fast paced as being around her in the lab could be, she never seemed to forget her role as our advisor and mentor. While life in her lab could be tense, when all was said and done Roxana split her focus between developing her research assistants as researchers and her actual research agenda. What we learned from a certain experience that could make us better researchers in the future seemed to be as important to her as the actual research results.

As my advisor, Roxana and I often discussed how to balance academic life with home life. When meeting with her, her first question was always to ask if I was bringing my young daughter, Anni. She would intentionally select times to meet based on whether Anni would be able to join us. At the end of our meetings Roxana would always offer to babysit for me if I needed to be at school and did not have someone to watch Anni.

One of the greatest experiences in life is having a professional mentor who you admire for more than just being a professional, and I was lucky to have had that in Roxana. During the years, she planted seeds in my life by giving little parts of herself, her encouragement, patience, compassion, drive among many, many others. As we move forward, I know the

best way to honor and remember Roxana is to allow those seeds to keep growing by living what she taught.

Cari Hushman

Educational Psychology Ph.D. Candidate

Dr. Moreno's Research Assistant and Doctoral Advisee

I first met Roxana while enrolled in her research externship course. Roxana was beginning her tenure-track position at the University of New Mexico and I had just begun my doctoral program. Roxana's recently hired lab assistant quit without notice, leaving her with piles of unanalyzed written protocols to score. I asked if I could take the student's place. This began a mentorship and a personal friendship that I had hoped would last much longer.

Without a doubt, Roxana was known and recognized by many as one of the leading authorities on cognitive theory. And her work had just begun. However, a few of us were fortunate enough to know Roxana as a mentor and teacher, roles in which she was equally gifted. Roxana applied the principles of cognitive learning to her teaching and mentorship of advisees with seamless grace. She knew how to challenge her students to reach beyond their comfort level. She knew how to scaffold, motivate, support, and encourage our learning.

I was privileged to know Roxana and to witness her passion, knowledge, courage, and humility. We all feel the loss of her contributions to the science of learning. I feel the loss of a great mentor and friend.

Alfred Valdez

Assistant Professor of Special Education & Communication Disorders

New Mexico State University

Dr. Moreno's Former Research Assistant and Doctoral Advisee

"Cool moist air moves over a warmer surface and becomes heated..." So begins the multimedia lesson on lightning formation that Roxana Moreno developed for our first major study on multimedia learning, published in the *Journal of Educational Psychology* in 1998 (Mayer and Moreno 1998). The article is based on work she started in her first years of graduate study with me at UCSB, and since then, the lightning passage has been used in more than a dozen published experiments conducted at UCSB and around the world. Like a lightning strike, Roxana burst onto the scene with a significant contribution to cognitive theories of how people learn from words and pictures. The article was the first of what was to become a string of nine research articles we published together in the *Journal of Educational Psychology*, as well many other research articles, theoretical pieces, and book chapters all contributing to our understanding of how to design multimedia instruction (Fig. 1).

Within 3 years of receiving her Ph.D., she was already recognized as one of the top 20 most productive educational psychologists in the world for 1991–2002 in *Contemporary Educational Psychology*. A few years later, she was again listed among the top 20 most productive educational psychologists for 2003–2008 in a follow-up review (Jones *et al.* 2010).

Roxana soon expanded her work beyond lightning strikes, to examine media ranging from narrated animation to virtual reality to educational games to training video, and to examine subject matter ranging from botany to mathematics to professional development in teaching. Along the way she was able to incorporate motivational and metacognitive factors within the emerging cognitive theories of multimedia learning, creating her cognitive–affective theory of learning with media.

Fig. 1 Early words and graphics from Roxana Moreno. (Adapted from Mayer and Moreno 1998)

“Cool moist air moves over a warmer surface and becomes heated.”

Anyone who has had the opportunity to work with Roxana knows she was an educational psychologist with amazing focus, talent, energy, skill, zest, and brilliance. The quality of her research reflected her unwavering commitment to excellence, and the quantity of her research reflected her unstoppable intellectual curiosity. A constant in her scholarship was her insistence that educational practice should help all students and should be based on high-quality research evidence.

I had the privilege of serving as Roxana’s mentor throughout her graduate career in UCSB’s psychology doctoral program from 1995 through 1999, and continuing to work with her on various writing projects thereafter. She came to graduate school with a very focused objective of learning how to conduct and publish high-quality research in educational psychology. My unbiased assessment is that she accomplished her goal. Her contributions to educational psychology—though spanning only a few precious years—are simply electrifying.

Richard E. Mayer

University of California, Santa Barbara

When someone passes away, it always affects those who were close. In Roxana’s case, it also affects an entire academic field. She was a giant in our field whose memory will not be erased by her passing. In a few short years, she left a permanent mark. While we will miss her future contributions, we are grateful that she was with us sufficiently to change us all. Rest in peace, Roxana.

John Sweller

School of Education

University of New South Wales

Sydney NSW 2052

Australia

I was introduced to Roxana Moreno on Bourbon Street in New Orleans at AERA in 2002 by Terri Flowerday. I was looking forward to our return there in 2011 for AERA again. Sadly that will not happen. From that beginning, my association with Roxana grew from acquaintance to colleague to friend. My wife and I developed a close friendship with Roxana and her husband Dante. Over the years we shared many enjoyable and memorable times at their home in Albuquerque, especially meals prepared by Dante who had been a professional chef.

Professionally, Roxana pursued her research and scholarship with an energy and gusto that few of us can hope to match. In her still young career, she produced a legacy of publication and scholarship that few attain in a lifetime. Her work had already opened new possibilities for advancement of theory and practice and held the promise of more to come. Sadly, this promise will not be fulfilled. Those of us in the field will now have to move forward without her intellect and gusto to help guide us. Our task will be more difficult.

Most are familiar with Roxana's ground-breaking research in multimedia. I will not reiterate that contribution here. Rather, I would like to briefly mention a research thread of Roxana's that few in the field are likely aware of. In a radical departure from the multimedia research we associate with her, she had spearheaded a NSF-funded in-depth longitudinal study of elementary and middle school student math learning and the factors influencing that learning with a focus on understanding achievement of ethnic minority students, especially Native Americans. Those of us involved in this research were actively engaged in manuscript writing right up to her passing. Hopefully, as results of this work are published, she will again be opening new possibilities for advancement of theory and practice in learning and motivation in the classroom.

What I and I think the field have lost is Roxana's ability to "think big" by addressing important questions in learning, technology, multimedia, and Science, Technology, Engineering, and Math (STEM) education, and her ability to address these big questions with rigorous science. Her work is an exemplar of how to conduct quality research and scholarship. She was the ultimate partner for having an "intellectual" discussion. I will miss those discussions. We all will miss where she could have led the field in the future.

Duane F. Shell

*Department of Educational Psychology
University of Nebraska—Lincoln*

With great sadness we learned about Roxana's passing. This message came as a sad surprise and left us deeply shocked.

We got to know Roxana in an international network through different annual meetings of the American Educational Research Association (AERA) and the European Association for Research on Learning and Instruction (EARLI). She was a very welcome guest of our research group in Germany on several occasions.

The last project that we realized together was an edited volume on cognitive load theory (Plass *et al.* 2010). Another paper was just finished before she passed away (Park *et al.* 2010). She liked this paper very much because it integrates the cognitive and affective perspectives on learning with multimedia instruction and is highly related to her Cognitive–Affective Theory of Learning with Media (Moreno 2006). One more recent paper, which we have just submitted, was at least touched by her in its early stages. The last years have been a fruitful time for our international research group.

We loved working with her. She was open-minded as well as full of energy and humor. Moreover, she liked critical thinking. Terri Flowerday said that working next to her office was like working next to a tornado. We were sometimes feeling like being in this tornado.

We often worked in shift work due to the time shift of 8 h between Albuquerque (New Mexico, USA) and Saarbrücken (Germany). It was pretty funny to write a paper while one was sleeping at the one end of the world while the other was preparing the next version of the paper at the other end, which the first got very early on the next morning. It sometimes felt like being out of time and space being virtually connected and involved in a high level discussion on cognitive and affective processes of multimedia learning.

In our research group, we spoke Spanish as well as English, as she was born in the US as a child of Argentinean parents and lived for some years in Buenos Aires. Spanish was much more our common private language. We called her kindly by the Spanish nickname “Dynamita” (the reader is asked to imagine a Spanish pronunciation here).

During the last years, she was always virtually by our side. With her death we not only lose one of our best scientists, we lose a dear friend and a wonderful human being. She loved science, arts, music and dancing that was reflected in her vivid character. She is still in our heart. We will keep her in mind as a great and inspiring person full of energy and humor. And we will keep working on the wonderful work she gave the impulse for.

As Roxana’s international colleagues, we would like to send our best wishes to all her other co-workers in the United States of America, Australia and Europe to process this loss.

Babette Park & Roland Brünken

Saarland University, Saarbrücken, Germany

When I first read Roxana’s work on multimedia learning and her summary article on nine ways to reduce cognitive load, I would have never imagined that I would 1 day work closely with this eminent scholar in educational psychology. My background is mainly in electrical and industrial engineering and my technical engineering research is on communication networking. However, prompted by several factors, including a desire to improve my teaching, my wife Jana pursuing a Ph.D. in educational technology, and being next-door neighbor to the late Raymond Kulhavy, from about 2003 onward I branched out to pursue engineering education research. While my early dabbling in engineering education research was personally interesting, I quickly realized that for impactful research that brings the much needed advances in engineering education, I would need a collaborator with a vast background in educational psychology and an interest to tackle new domain areas. Raymond and Jana suggested Roxana. So, in early 2005 I contacted her via e-mail, doubting whether I would receive a response. Surprisingly, she responded very quickly, and a few days later we had scheduled our first phone call. Despite the vast differences in our backgrounds, we connected very well. Despite being very busy with her already ongoing research projects and teaching, she took the time to understand the issues I was trying to investigate in engineering education. She even learned basic electrical circuit analysis so she could better understand the domain-specific challenges that novice learners are up against. We continued collaborating via e-mail and I first visited Roxana at UNM in the summer of 2005. Our collaborations quickly increased in pace. Within a few months, we had drafted an overarching research agenda that infuses educational psychology into engineering education and first presented this research agenda at the 2005 *IEEE Frontiers in Education (FIE) Conference*.

From these early beginnings, our collaborative research grew to an NSF-funded research program involving several of Roxana’s students at UNM as well as students at ASU and Dr. Gamze Ozogul as a post-doctoral researcher at ASU. At least once a year, on occasion twice a year, Gamze and I would drive to UNM to visit Roxana. The car was usually loaded with test materials and samples of the exact laptops with the learning modules used in experiments. Roxana would meet with us at her office for one or two intense days of reviewing developed learning environments and collected student work as well as drafting manuscripts, and designing the next experiments. Her work style was highly focused and high paced. In all design steps, she brought both her vast background in educational psychology as well as the practical “what would an experienced teacher do here” considerations to bear. One evening, we would usually have dinner at her house prepared by her husband Dante who is an excellent cook. In the evening’s “brainfried” state as Roxana called it, we would also enjoy some of the themed rooms in her house.

Her contributions to our collaborations have greatly advanced the nascent field of engineering education research aside from enriching the field of educational psychology. By the time of her untimely passing we had presented several collaborative papers at AERA and EARLI, as well as the IEEE FIE conference. Roxana usually presented our joint work at the educational psychology conferences, while I attended and present at the engineering education conferences. Overall, Roxana kept a busy travel schedule to keep abreast of the latest research trends and contribute her vast expertise to funding agencies. However, she was not fond of the travails of modern air travel, she used to liken taking a flight to “being taken hostage by the airline”. Twice we jointly attended conferences, namely AERA in April 2009 in San Diego and IEEE FIE in San Antonio in October 2009. We also published two collaborative articles in the *Journal of Engineering Education* and one article in the *Journal of Educational Psychology*.

Sadly, Roxana left us much too soon. We had several ongoing studies at the time of her passing that we are working to complete as best as we can in the manner she envisioned them. She also left us with many plans and sketches of new studies and experimental designs. I am very grateful for all I learned from her about rigorous educational research and effective teaching. Roxana was an inspiring colleague, an innovative teacher, and a dedicated mentor who leaves a lasting legacy in the educational field.

Martin Reisslein

School of Electrical, Computer, and Energy Engineering

Arizona State University

reisslein@asu.edu

<http://mre.faculty.asu.edu>

References

- Jones, S. J., Fong, C. J., Torres, L. G., Yoo, J. H., Decker, M. L., & Robinson, D. H. (2010). Productivity in educational psychology journals from 2003 to 2008. *Contemporary Educational Psychology*, 35, 11–16.
- Mayer, R. E., & Moreno, R. (1998). A split-attention effect in multimedia learning: Evidence for dual processing systems in working memory. *Journal of Education & Psychology*, 90, 312–320.
- Moreno, R. (2006). Does the modality principle hold for different media? A test of the method-affects-learning hypothesis. *Journal of Computer Assisted & Learning*, 22, 149–158.
- Park, B., Moreno, R., Seufert, T., & Brünken, R. (2010). Does cognitive load moderate the seductive details effect? A multimedia study. *Computers in Human Behavior*, doi:10.1016/j.chb.2010.05.006.
- Plass, J. L., Moreno, R., & Brünken, R. (2010). *Cognitive load theory*. New York: Cambridge University Press.