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A Survey of Creativity Courses at Universities in Principal Countries

ABSTRACT The following is a review of creativity courses and programs offered at universities in Europe, North America, Japan, and China. Creativity courses and programs occur in a variety of disciplines, but are found most frequently in fields such as business; education and psychology; and engineering, science, and technology. This paper provides information about course and program titles, characteristics, and instructors.

INTRODUCTION In 1967, the Stanford Research Institute conducted a survey to investigate the status of creativity and problem-solving courses at different universities. The survey revealed that while nine universities or colleges offered courses to cover these topics, only one institution had developed a full-time course on creativity (Edwards, 1967).

Today, creativity is studied not only in the United States, but also in many countries throughout the world. Discovering how many universities or colleges have courses in creative studies, as well as identifying specific academic areas in which these courses exist, is the focus of this study.

METHODOLOGY For nearly six years, lead author Fangqi Xu reviewed various resources, including professional journals, university catalogs, program pamphlets, course syllabi, websites, and private letters, as a means of learning about creativity studies. Prior to this current project, he published several papers describing creativity research in Europe, North America, Japan, and China (1992; 1994; 1998; 1999; 2001), and much of this present paper is based on this earlier research. Co-authors Ginny McDonnell and William R. Nash assisted with the preparation of the final document.

TABLE 1. Note Numbers and Website Addresses for Course and Program Descriptions.

Notes	Websites
1	www.buffalostate.edu/centers/creativity/
2	www.gsb.columbia.edu/faculty/
3	http://140.192.220.26/html/academics/course_listing.shtml
4	www.insead.edu/mba/programme/prog_core.htm
5	www.hbs.edu/mba/admin/acs/wi03addlinfo.html
6	www.kelley.iu.edu/mba/curriculum/courses.cfm
7	www.indiana.edu/~bulletin/iub/business/2002-2004/courses.html
8	www.sanno.ac.jp/tukyodt1carr.html
9	www.london.edu/mba/Content/Electives/electives.html
10	www.mbs.ac.uk/programmes/mba/html/ft_projects.cfm
11	www.degrootemcmaster.ca/dir/atoz/basadur.aspx
12	www.northwood.edu/catalog/academic_matters/courses/hum.html
13	www.gsb.stanford.edu/academics/catalog/
14	www.haas.berkeley.edu/MBA/elective2.html
15	http://drucker.cgu.edu/html/prospective/fullpart/courses.htm
16	www.bus.umich.edu/Admissions/Emba/Faculty/Meet.htm
17	www.usm.maine.edu/sb/mba/curriculum/management/MBA643/mba643.html
18	http://www.usm.maine.edu/lac/directory/profiles/coste.html
19	http://mba.zju.edu.cn/mba/default.htm
20	www.fullerton.edu/
21	http://xsc.seu.edu.cn/zsb/graduated/0110.htm
22	www.pku.edu.cn/academic/csss/teachers.htm
23	http://gsecourses.harvard.edu/h175
24	www.coe.tamu.edu/epsy/faculty.html
25	www.amcreativityassoc.org/
26	http://psych.ucsc.edu/Content/Courses/welcome.html
27	www.gifted.uconn.edu/
28	www.coe.uga.edu/edpsych/faculty/prof.html
29	http://omega.cc.umb.edu/~cct/courses.html
30	http://edtech.tph.wku.edu/~sramsay/
31	www.yale.edu/psychology/brochure/Course_Offerings.html
32	www.yorku.ca/sasit/sts/sts_peop.html
33	http://www.chinatrainning.net/teachers/teacher_detail.jsp?teacher_id=36
34	www.jaist.ac.jp/ks/index-e.html
35	http://stvp.stanford.edu/teaching/courses.html
36	http://bama.ua.edu/~tward/creativityclass.html
37	http://siswebstu.ua.edu/ctf_offline/20034/MC_495.htm
38	http://catalogs.ua.edu/catalog02/courses_10930.html
39	http://web.uccs.edu/bethel/ext_studies_course_descriptions.htm

To ensure accuracy of data that were collected, Fangqi Xu made contact with individual instructors by electronic or regular mail. Based on the fact that the majority of instructors responded to the request for information, it is believed that these data are reliable. It is the authors' wish that the following information will be useful to both educators wanting to develop creativity studies and to students exploring different universities' course offerings and programs. Table 1 provides website addresses for the courses and programs cited in the Results section. A course is defined as a subject area offered at a university or college. A student completes different courses in order to earn several credits. For example, at Buffalo State College, each course provides three credits. On the other hand, each course earns two credits in Japan. A program is defined as a specific major at a university or college. A program consists of several courses. For example, in the United States a Master's Degree program includes at least ten courses or thirty credits. Both graduate and undergraduate programs were included in the survey.

RESULTS —
COURSES, FACULTY,
AND PROGRAMS
ON CREATIVITY

Courses and programs occur most frequently in centers, colleges, departments and schools that deal with the following topics: 1) Business, 2) Education and Psychology, and 3) Engineering, Science, and Technology. Thus, the results of the survey are organized under those headings, with a few listed under an Other category at the end. At the same time, the authors decided to highlight Buffalo State College by listing it first due to the historical role it has played.

Historical Significance

Buffalo State College

Buffalo State College (BSC) appears to be the first university to establish creative studies as an approved subject area. In 1967, graduate courses were developed under the guidance of Professor Sidney Parnes and Professor Ruth Noller (both are now Professor Emeritus). The International Center for Studies in Creativity was set up that year to provide a permanent academic home. In 1974, an undergraduate program was developed. In 1975, a graduate degree program was approved, apparently making BSC the first college or university to offer a Master of Science degree in Creativity. Today, the program has five full-time and several part-time faculty. Professor Gerard J. Puccio is Director of the center. In all, BSC offers fourteen

courses, including “Creative Approaches to Problem Solving” (CRS302s), “Principles in Creative Problem Solving” (CRS559), “Creativity Assessment: Methods and Resources” (CRS580), and “Designing & Developing Creativity Education” (CRS680). Distance education courses and a graduate certificate program in creativity are also offered. A creative studies degree in distance education was to be available in September, 2003. (Notes 1)

Business

Claremont Graduate University

In recent years, creativity researchers have paid close attention to the work conducted at the Peter F. Drucker Graduate School of Management. The school invited Dr. Mihaly Csikszentmihalyi to develop and teach a MBA course entitled “Creativity and Innovation” (MGT361). Dr. Csikszentmihalyi is Professor Emeritus and former Chair of the Department of Psychology at the University of Chicago, and currently is C.S. and D.J. Davidson Professor of Psychology and Management at the Drucker School of Management at Claremont Graduate University. He has lectured on creativity for thirty years. A prolific writer, he has written 185 journal articles and 14 books. (Notes 15)

Columbia University

A MBA elective course entitled “Entrepreneurial Creativity” (B8799-03) is offered at Columbia Business School. Associate Professor of Management Sheena S. Iyengar and Professor Clifford Schorer teach this course. In order to protect intellectual property, Dr. Iyengar requires students to sign a Confidentiality Agreement to ensure that all proprietary ideas shared during the class remain confidential and that the original idea remains the property of the owner. Another creativity course is offered at Columbia by alumnus and Adjunct Professor Dr. Srikumar S. Rao. The course is entitled “Creativity & Personal Mastery” (B9601-050). (Notes 2)

DePaul University

At DePaul University, there is an Entrepreneurship Program in the Charles H. Kellstadt Graduate School of Business. Their MBA program includes the required course “Creativity in Business” (MGT573). Students explore the nature and role of creativity and creative problem-solving in business. Professor Lisa

Gundry and Dr. Jill Kickul discuss different creativity theories and methods, and apply real-life business cases in their lectures. Dr. Gundry is Director of the Ryan Center for Creativity and Innovation at DePaul's College of Commerce. (Notes 3)

France

In France, INSEAD offers a MBA elective course "Creativity in Business." Dr. Thomas Mannarelli, Assistant Professor of Organizational Behavior, teaches the course. Dr. Mannarelli joined INSEAD after he earned his Doctorate Degree at the Haas School of Business at the University of California, Berkeley. (Notes 4)

Harvard University

Harvard Business School has a creativity course that started in 1985. The instructor, Professor Teresa M. Amabile, is the Edsel Bryant Ford Professor of Business Administration. A social psychologist, her research includes team creativity and organizational innovation. Dr. Amabile is the author of five books on creativity and has written over one hundred papers and chapters. Currently, she teaches "Managing for Creativity" (1685) and "Field Study Seminar in Managing for Creativity" (6685). Both are elective courses for the MBA program. (Notes 5)

Indiana University

The Department of Management in the Kelley School of Business at Indiana University offers a MBA course entitled "Creativity and Innovation: Generating New Venture Ideas" (W503). The instructor, Professor Marc J. Dollinger, has instituted many exciting ideas that are detailed in Fangqi Xu's earlier paper, "Entrepreneurship Education and Creative Education" (2001). Laura Buchholz also lectures on creativity in an undergraduate course entitled "Creativity in Marketing" (M341). (Notes 6, click Management and W503; & Notes 7)

Japan

Since the opportunity to earn a MBA came later in Japan than in Europe and America, formal programs are presently unavailable in Japan. Nevertheless, there are many experts with a great deal of knowledge on creativity, particularly in the area of creative engineering in Japan. For example, in the Global

Business School at Nihon University, the course “Planning Creativity Engineering” is part of the second-year curriculum of the MBA program. The course “Creative Thinking Course” (CTC) at Sangyo Noritsu College in Japan has existed for forty years. This course is especially designed for business organizations wanting to train their employees in creative thinking skills. A popular course for Japanese companies, 9,000 people had completed CTC by 1990. According to Mr. Tetsuo Iguchi, Head of the Research Institute of Creative Management, today’s figures would be much larger (1992). In 1992, Sanno University started a correspondence course named “Creativity Development.” (Notes 8)

London Business School

The London Business School offers a MBA elective course entitled “Managing Innovation, Creativity & Design.” The course is designed for organizations that wish to improve their innovation performance. Professor of Organizational Behavior, Dr. Rob Goffee, and his colleagues are lecturers for the course. (Notes 9)

Manchester Business School

Manchester Business School is known for creative studies throughout the United Kingdom and Europe. Dr. Tudor Rickards, Professor of Creativity and Organizational Change, has been lecturing on creativity and innovation since 1972. Considered a leading researcher in creative studies, Dr. Rickards teaches a full-time MBA and Executive MBA course entitled “Creativity & Innovation Project”. He has authored twelve books including *Creativity and the Management of Change* and *Handbook for Creative Team Leaders* (co-author, Ms. Susan Moger). Dr. Rickards was founder and co-editor of the *Creative Behavior and Creativity Research Journal*. Ms. Moger is also a creativity researcher at the Manchester Business School. (Notes 10)

McMaster University

Dr. Min Basadur, Professor of Organizational Psychology and Innovation at the Michael G. DeGroote School of Business in Hamilton, Ontario, Canada, teaches courses in creative and critical thinking, and organizational change and innovation for MBA students. He also teaches a workshop entitled “Creative and Critical Thinking” (W602C01). Considered a leading

researcher on creativity in Canada and the United States, Dr. Basadur founded a consulting company named Center for Research in Applied Creativity in 1981. He is described as an entrepreneur who applies creativity theory to real life. (Notes 11)

Northwood University

Since 1999, Adjunct Professor Linda Henderson has been teaching a course entitled "Creativity and Business" (HQM310) at Northwood University. Her colleague, Paula Ulmer, teaches another course entitled "Creativity" (HQM310). Northwood University is also home to the Alden B. Dow Creativity Center. The Center has existed for twenty-seven years and has hosted the International Conference on Creativity in Colleges and Universities every summer since 1989. (Notes 12)

Stanford University

At the Stanford University Business School, Dr. Michael L. Ray is the John G. McCoy-Banc One Corporation Professor of Creativity and Innovation and Marketing. Dr. Ray has been teaching "Creativity in Business" for nearly thirty years. He also teaches a course entitled "Personal Creativity in Business" (GSBB341). His lecture is available on videotape as a part of the Executive Briefings Video Program offered at the Stanford Business School. (Notes 13)

University of California, Berkeley

A MBA elective course, entitled "Creativity in Business" (MBA255), is offered at the Haas School of Business. Professor and Chair of Leadership and Communication, Lorraine Tyson Mitchell, and Professor Barry Staw teach the course. (Notes 14)

University of Michigan

Dr. Jeffrey T. DeGraff is a Clinical Associate Professor of Management Education at University of Michigan Business School. Since 1990, Dr. DeGraff has been teaching the MBA elective course "Managing Creativity" (OBH513). It covers innovative products and service development, creative management, hiring creative personnel, establishing a creative work environment, creative development centers and networks, creativity processes, and personal creative methods. (Notes 16)

University of Southern Maine

At the School of Business, Dr. Richard Grover teaches the MBA course "Change and Creativity" (MBA643). He is Associate Professor of Organizational Behavior. Another course, "Creativity" (MLS612), will be included in a Master's degree in leadership studies in the Spring of 2004. It has been offered recently at the Lewiston/Auburn campus of the university. Tara Grey Coste, who has a Ph.D. in Rhetoric and Technical Communication and is Assistant Professor of Leadership and Organizational Studies, teaches the course. Dr. Coste is also President of the American Creativity Association. (Notes 17 & 18)

Zhejiang University

In China, Professor Yaolie Zhou has taught a course on creativity in the College of Management at Zhejiang University, since 1997. The course was first named "Creative Technique" but was recently changed to "Theory and Application of Creativity." This is an elective course available to undergraduate and graduate students. (Notes 19)

Education and Psychology

California State University, Fullerton

Mark A. Runco is a tenured professor in the Department of Child & Adolescent Studies in the College of Human Development and Community at California State University, Fullerton. A widely known expert on creativity, he has been Editor of the *Creativity Research Journal* since 1988. Dr. Runco teaches a senior seminar entitled "Creativity" (CAC490T). (Notes 20)

China

Although there is not an extensive history of creative education at universities in China, approximately 50 universities/colleges currently offer courses on creativity. There is a Master's degree program offered in Creative Education at Southeast University. The program was developed under Professor Jiazeng Li who has been the Director of The Institute of Creative Engineering and Creative Education Research of the university since 1999. At Beijing University, China, the Center for Social Studies of Science offers a graduate-level course named, "Scientific Creative Studies" (04210750). Professor Shixia Fu is the instructor. A psychologist and philosopher, Shixia Fu is one of the leading researchers on creativity in China. Between

1992 and 2001, several students completed their Masters and Doctorate degrees in creativity research, creative thinking, J.P. Guilford's psychology, and the creativity of scientific organizations under her guidance. (Notes 21 and 22)

Harvard University

Howard Gardner is the John H. and Elisabeth A. Hobbs Professor of Cognition and Education in the Department of Human Development and Psychology at the Harvard Graduate School of Education. Best known for his theory of multiple intelligences, Gardner is a developmental psychologist and neuropsychologist. Dr. Gardner's research examines intelligence, creativity, leadership, child development, and neuroscience. He teaches a graduate-level course, named "Creativity and Morality: Need They Be Disjunct?" (H175). (Notes 23)

Japan

In Japan, the history of creative education also goes back to the 1960s. Akira Onda, Professor Emeritus of Toyo University, Saburo Sato; Professor Emeritus of Osaka City University; and Hiromoto Ogita, Professor Emeritus of Kinki University, have contributed a great deal to the development of creative education in Japan. Today, the leading scholars in the field are members of the Japan Creativity Society (JCS). For example, Professor Yuten Higa at the Department of Education at Toyo University is the former President of JCS. Professor Kenichi Yumino in the Department of Education at Shizuoka University is Director of JCS. Each teaches creative education at their respective universities.

Texas A&M University

At Texas A&M University, Professor William Nash has engaged in course and program development for a number of years. He has been on the faculty since 1972 in the Department of Educational Psychology and serves as Coordinator of a graduate specialization on "Intelligence, Creativity, and Giftedness." In 1978, he developed and continues to teach a graduate level course entitled "Creativity Thinking" (EPSY624). In 1998, two additional courses were developed, "Creative Genius" (EPSY645) and "Intelligence and Creativity" (EPSY648). Dr. Nash teaches the first, and his colleague, Dr. Stephanie Knight, teaches the latter. Texas A&M is currently in the process of developing a package of four undergraduate creativity courses

with guidance from another colleague, Dr. Joyce Juntune, that will become the core of a creative studies minor. The impetus for this endeavor was the recent establishment of a cross-disciplinary Institute for Applied Creativity. In 1988, Nash formed a Charter Board of Directors with Dr. Juntune and Dr. Cecil Reynolds from Texas A&M, Dr. Dorothy Sisk from Lamar University, and Dr. E. Paul Torrance from the University of Georgia to found the American Creativity Association (ACA). Nash served as Chair of the Charter Board, while Juntune served as the first Executive Director of ACA, and Sisk served as ACA's first President. Central to ACA's mission is the encouragement of worldwide research in creativity. (Notes 24 and 25)

University of California, Santa Cruz

The history of teaching creativity at the University of California, Santa Cruz is traced to Professor Emeritus, Frank Barron. Dr. Barron's successor, Associate Professor, David Harrington, currently teaches courses on that topic. Since 1976, Professor Harrington has been teaching "The Psychology of Creativity" (162A) and two seminars he developed entitled "Special Topics in Creativity" (162B) and "Fostering Creativity and Imagination" (161). (Notes 26)

University of Connecticut

At the University of Connecticut's Neag School of Education, the Neag Center for Gifted Education and Talent Development offers two graduate-level courses in creativity. The first course is "Creativity" (EPSY365) and the second is "Creative Problem Solving" (EPSY360). Dr. Joseph S. Renzulli is Professor and Director of the program; he is widely published and considered a leader in the field of gifted education. The other instructors are Dr. Del Siegle and Dr. Susan Baum. (Notes 27)

University of Georgia

Creativity research in Colleges of Education began in the 1960's. The oldest program appears to be in the Department of Educational Psychology in the College of Education at the University of Georgia. The Gifted and Creative Education Program includes two graduate-level courses. The first one, "Creativity: Instructional Procedure and Psychology Process" (EPSY8240), is required for a Master of Education degree in Educational Psychology. The second one, "Theory of Creativity" (EPSY8220), is required for a Master of Art degree in

Education. Both courses are required for students pursuing a doctoral degree in either Education of Gifted or Educational Psychology. There are four faculty members in The Gifted and Creative Education Program, including Professor Mary M. Frasier, Associate Professor Bonnie Cramond, Assistant Professor Thomas Hebert, and Assistant Professor Tarek Grantham. The founder of the University of Georgia's program was Professor E. Paul Torrance (now deceased). Dr. Torrance is considered a pioneer in the identification and development of creative potential. The Torrance Center for Creative Studies was established in order to continue his extensive work. Many of his former students are active in the field today. (Notes 28)

University of Massachusetts, Boston

In 1980, the University of Massachusetts at Boston established the Critical and Creative Thinking (CCT) graduate program in the College of Education, although it is clearly interdisciplinary. It consists of five required foundation courses, twelve elective courses, and three required final courses. Four of the courses are directly related to creativity. These are: 1) "Creative Thinking" (CCT602), 2) "Seminar in Creativity" (CCT612), 3) "Creative Thinking, Collaboration, and Organizational Change" (CCT618), and 4) "Creativity and Criticism in Literature and Art (CCT630). "Creative Thinking" (CCT602) is a required course and the others are elective. Professor Allyn Bradford, Dr. Peter Taylor, Dr. Nina Greenwald, and Mr. Ben Schwendener teach these courses. (Notes 29)

Western Kentucky University

At Western Kentucky University's Department of Psychology, which resides in the College of Education and Behavioral Science, Dr. Shula Mussnug teaches a creativity course entitled "Intelligence and Creativity" (Psy365). Dr. Mussnug is an Associate Professor of Psychology. (Notes 30)

Yale University

Dr. Robert Sternberg is IBM Professor of Psychology and Education, and Director of the Center for Psychology of Abilities, Competencies, and Expertise or PACE, at Yale University. His research includes, but is not limited to, human intelligence, creativity, and thinking styles. Professor Sternberg has published numerous books and articles in creativity. His books,

The Nature of Creativity and *Handbook of Creativity* are used as textbooks at many universities. Sternberg, in collaboration with Todd Lubart, developed the Investment Theory of Creativity. He also teaches a graduate-level course entitled, “Creativity” (505a). (Notes 31)

York University

Associate Professor, Igor Kusyszyn, teaches three creativity courses in the Department of Psychology at York University in Toronto, Canada. These courses are: “Creativity: Pure and Applied” (PSYC3550), which is offered to third-year students; “Advanced Seminar in the Psychology of Creativity” (PSYC4110), which is offered to fourth-year honor students; and “Science and Creativity” (NATS1810), which is offered to first-year natural science students. Fifty-percent of students’ grades in all three courses, is based on a project entitled “Improve the World.” For the project, students are required to 1) identify a real world problem and 2) solve the problem using their natural abilities and the creative problem solving tools learned in class. (Notes 32)

Engineering, Science, and Technology

China University of Mining and Technology

In China, the University of Mining and Technology is the leading institution in the field of creative studies. Professor Shouqiang Zhuang is a geologist, founder, and Director of the Center of Teaching and Research for Creative Studies. Professor Zhuang conducts the teaching and research activities for the university. In 1999, Dr. Zhuang started a series of courses on creativity for undergraduate and graduate students. (Notes 33)

Japan’s Advanced Institute of Science and Technology

In 1995, the School of Knowledge and Science at Japan’s Advanced Institute of Science and Technology (JAIST) established a Chair of Creativity Support Systems. The Chair researches the principles for building knowledge-based systems and knowledge-creating environments and applies these systems to real world problems. According to Professor Susumu Kunifuji, Vice President of the Japan Creativity Society, the research includes; 1) creative thinking support systems, 2) group awareness, and 3) knowledge systems. The primary goal

is to “make the most of all elemental techniques to build creativity support systems”. The position of Chair is seen as one that holds a great deal of respect among graduate students, leaders throughout the industrial world, and government and municipal officials. (Notes 34)

Stanford University

The Stanford Technology Ventures Program (STVP) is hosted by the Department of Management Science and Engineering. It consists of a series of courses, including “Creativity and Innovation in Organization” (MS&E277) that is taught by Dr. Tina L. Seeling, Executive Director of the program. This course is designed to stimulate individual creativity while exploring a wide range of variables that affect creativity and innovation in organizations. A key component of the course is a team project. Professor Emeritus Dr. James L. Adams is founder of the course. He is a professor of Industrial Engineering Management and has been teaching for approximately thirty years. (Notes 35)

University of Oklahoma

At the School of Aerospace & Mechanical Engineering, Donna L. Shirley has taught “Managing Creativity” (ENGR4510.902) since 1997. Professor Shirley has a Master in Science degree in Aerospace Engineering. She is also President of Managing Creativity, a consulting firm. Shirley is the recipient of many awards for creative management. (Notes 36)

Others

New College

Dr. Theodore L. Trost is an Assistant Professor of Religious Studies and has been teaching “Humanities & Creativity” (NEW212) at New College since 1999. (Notes 37)

University of Alabama

Dr. Thomas B. Ward teaches graduate and undergraduate courses on “Creativity in Communication” (MC650 , MC495) at the Center for Creative Media. He is Senior Research Fellow and Director of Creativity Science and a Professor of Advertising and Public Relations. He is currently editor of the *Journal of Creative Behavior*. (Notes 38)

University of Colorado

The College of Nursing and Health Sciences offers two courses in creativity. One is "Creativity and Critical Thinking" (NURS453) and the second is "Creative Journey" (HSCI457). Ms. Trellis Moore and Dr. Lea Gaydos teach these courses. (Notes 39)

CONCLUSION Since 1967, there has been an enormous expansion in creative studies throughout the world. Although only a few universities offer creativity as a specific academic field, there is a tremendous increase of educational opportunities within the area. Creativity involves many psychological factors and will continue to grow as an interdisciplinary field. It is believed that, with further examination, creativity courses would be discovered in other subject areas such as architecture, literature, art, music, and athletics. This survey has shown that it is an exciting and changing time for creative studies. It is hoped that universities will continue to develop and expand their research efforts and instructional programs in creativity.

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