

Ball State University  
College of Applied Sciences and Technology  
Curriculum Vitae  
December 14, 2018

1. **Name**

James C. Flowers (Jim)

2. **Department, Rank, Year of Appointment**

Department of Educational Studies

Professor

Appointed at Ball State University August 23, 1996

3. **Education**

3.1 **Degrees**

Ph.D., (1990) West Virginia University, in Forest Resources Science (Wood Science)

M.A., (1986) West Virginia University, in Technology Education

B.S.Ed., (1980) SUNY College at Buffalo in Industrial Arts

B.A., (1980) SUNY College at Buffalo in Philosophy (Liberal Arts)

4. **Assigned Time for Current Year (semester hours)**

	<b>SPRING 2018</b>	<b>FALL 2018</b>
Teaching	3	3
Research/Scholarly Productivity	3	3
Administration/Service	3	3
Advising	3	3

5. **Ball State Teaching**

5.1 **Assigned Classes (for the last 10 years)**

Fall semester, 2018

TEDU 510, Technology Use & Assessment (online)

Scholarship

Rapid Prototyping Lab Administration

Advisor, MA in Technology Education

Instructor-of-Record for TDPT 280, 3D Prototyping, Section 1

Instructor-of-Record for TDPT 280, 3D Prototyping, Section 2

Spring semester, 2018

TEDU 495: Green Prototyping & Upcycling  
Scholarship  
Rapid Prototyping Lab Administration  
Advisor, MA in Technology Education  
Instructor-of-Record for TDPT 280, 3D Prototyping, Section 1  
Instructor-of-Record for TDPT 280, 3D Prototyping, Section 2

Fall semester, 2017

TEDU 585: Inquiries into 3D Prototyping (taught for no load)  
Scholarship  
Rapid Prototyping Lab Administration  
Advisor, MA in Technology Education  
TDPT 280, 3D Prototyping, Section 1  
Instructor-of-Record for TDPT 280, 3D Prototyping, Section 2

Spring semester, 2017

TMFG 495, Green Prototyping & Upcycling), taught with  
TMFG 595, Research Into Green Prototyping & Upcycling  
TEDU 510, Technology Use & Assessment (online)  
Instructor-of-Record for TDPT 280, 3D Prototyping, Section 1  
Instructor-of-Record for TDPT 280, 3D Prototyping, Section 2  
THES 698 (Cale Rauch)  
Advisor, MA in Technology Education

Summer I session, 2016

TEDU 698: Seminar in Technology Education

Fall semester, 2016

TDPT 280: 3D Prototyping, Section 2  
TMFG 585: Inquiries into 3D Prototyping (4 students, taught for no load)  
Scholarship  
Rapid Prototyping Lab Administration  
Advisor, MA in Technology Education  
Instructor-of-Record for TDPT 280, 3D Prototyping, Section 1

Spring semester, 2016

TMFG 495, Green Prototyping & Upcycling (initial offering with this prefix  
and number), taught with  
TMFG 595, Research Into Green Prototyping & Upcycling (initial offering  
with this prefix and number)  
Scholarship  
Rapid Prototyping Lab Administration  
Advisor, MA in Technology Education

Fall semester, 2015

TEDU 510, Technology Use & Assessment (online)

TEDU 102: Design Techniques (the instructor's first offering of this class)

Scholarship

Director of Online Education, department

Spring semester, 2015

TEDU 490, Green Prototyping & Upcycling (initial offering), taught with

TEDU 600, Research Into Green Prototyping & Upcycling (initial offering),

Graduate Enrollment Marketing assigned time

Scholarship

Director of Online Education, department

Summer I session, 2014

TEDU 698: Seminar in Technology Education

Fall semester, 2014

TEDU 690, Curriculum Development in Technology Education (online)

Creative Teaching Grant

Scholarship

Director of Online Education, department

Spring semester, 2014

TEDU 510, Technology Use & Assessment (online)

TMFG 585: Inquiries into 3D Prototyping (initial offering)

Scholarship

Director of Online Education, department

Fall semester, 2013

TEDU 510, Technology Use & Assessment (online)

TMFG 585: Inquiries into 3D Prototyping (initial offering)

Scholarship

Director of Online Education, department

Spring semester, 2013

TEDU 510: Technology Use & Assessment (online)

TDPT 280: 3D Prototyping

Research

(Director of Online Education, department)

Summer I session, 2016

TEDU 698: Seminar in Technology Education

Fall semester, 2012

TEDU 510: Technology Use & Assessment (online)

TDPT 280: 3D Prototyping

Scholarship

Director of Online Education, department

Spring semester, 2012

(Special Assigned Leave (sabbatical))

Fall semester, 2011

ITEDU 694, Curriculum Development in Technology Education (online)

Online Faculty Fellow

Research

Director of Online Education, department

Spring semester, 2011

ITEDU 510, Technology Use & Assessment (online)

ITDPT 280: 3D Prototyping

Research

(Director of Online Education, department)

Summer I session, 2010

TEDU 698: Seminar in Technology Education

Fall semester, 2010

ITEDU 694, Curriculum Development in Technology Education (online)

ITDPT 280: 3D Prototyping, taught with: ITDPT 303, Manufacturing Systems

Research

(Director of Online Education, department)

Summer Session I, 2010

ITEDU 698, Seminar in Technology Assessment (online, 2 sections)

Spring semester, 2010

ITEDU 510, Technology Use & Assessment (online)

ITEDU 690, History & Philosophy of Technology Education (online)

Research

(Director of Online Education, department)

Fall semester, 2009

ITEDU 694, Curriculum Development in Technology Education (online)

ITDPT 280: 3D Prototyping, taught with: ITDPT 303, Manufacturing Systems

Research

(Director of Online Education, department)

Spring semester, 2009

ITEDU 510, Technology Use & Assessment (online)

ITEDU 690, History & Philosophy of Technology Education (online)

Research

(Director of Online Education, department)

Summer I session, 2008

TEDU 698: Seminar in Technology Education

Fall semester, 2008

ITEDU 694, Curriculum Development in Technology Education (online)

ITDPT 280: 3D Prototyping (First time implementation as ITDPT 280),  
taught with: ITDPT 303, Manufacturing Systems

Research

(Director of Online Education, department)

## 5.2 Master's Theses / Research Papers / Creative Projects

Master's Thesis Committee Member for Minahil Hussain, Master's in Interior Design, Department of Construction Management and Interior Design, CAP, BSU. (2018-present).

Master's Thesis Committee Chair for Cale Rauch, Master of Arts in Technology Education, BSU. (2016-2018) Completed in May, 2018.

Master's Thesis Committee Member for Grace Douglas, Master's in Family and Consumer Sciences, BSU. (2016-2018) Completed in November, 2018.

Master's Thesis Committee Member for Kevin Miller, Master's in Architecture, BSU. (2014-2017) (completed)

Master's Thesis Committee Member for Prippan Tatiprasertchai, Master's in Family and Consumer Sciences, BSU. (2014-2018) Completed in Fall 2018.

Master's Thesis Committee Chair for Kristy Rhodes, MA in Technology Education Program, BSU. (2008-2009) (completed)

External Examiner for MSc in Creative Multimedia (by research) for Nataly Samsuar, Multimedia University, Malaysia. (2006 – 2007) (completed) Note: This is not through Ball State. (Related Item in 6.4.)

## 5.3 Doctoral Committees

Doctoral committee member for Mr. Craig A. McCaffrey, BSU. (2009 – 2014)  
(completed)

Doctoral committee member for Mr. Richard Willey, Adult, Higher, and Community Education, BSU. (2007 – 2012)

Doctoral committee member for Ms. Terri Drozd, Ed. Administration, BSU. (2005 – 2009)

Doctoral committee member for Ms. Heather Anderson. Counseling Psychology, BSU. (2001 - 2005) (completed)

Doctoral committee member for Mr. Andrew Nixon, Ed. Administration, BSU. (1998-2002) (completed)

#### **5.4 Advisor of Student Grants, Projects, or Teaching**

Mentor, instructional supervisor, and teacher-of-record for Mr. Cody Blackford as he taught TDPT 280, 3D Prototyping, Section 1, Fall 2018

Mentor, instructional supervisor, and teacher-of-record for Mr. Cody Blackford as he taught TDPT 280, 3D Prototyping, Section 2, Fall 2018

Mentor, instructional supervisor, and teacher-of-record for Mr. Alexander Wierzbicki as he taught TDPT 280, 3D Prototyping, Section 1, Spring 2018

Mentor, instructional supervisor, and teacher-of-record for Mr. Alexander Wierzbicki as he taught TDPT 280, 3D Prototyping, Section 2, Spring 2018

#### **5.5 Curriculum and/or new course development that has received university approval**

##### **5.5a New course development**

Proposed TMFG 380: Advanced Prototyping: Additive Manufacturing. (Proposed in Spring 2018, for first possible delivery in Fall 2019)

Developed TMFG 495, Green Prototyping and Upcycling, first implemented as TEDU 490 in Spring 2015

Developed TMFG 595, Research Into Green Prototyping and Upcycling, first implemented as TEDU 600 in Spring 2015

Developed ITMFG 585, Investigations into 3D Prototyping, first implemented in Fall 2013

Developed and taught new course: ITDPT 299x, Ideas to Products: 3D Prototyping. (First implemented in Spring, 2007. This was revised to become ITDPT 280, 3D Prototyping, first implemented in Fall, 2008.)

Developed and taught new course: ITDPT 160, Technical Analysis, with significant Web support (First implemented in Spring, 2001)

Developed and taught the department's first online course: ITEDU 510: Technology - Use and Assessment (First implemented in Fall, 2000 with two sections of 20 and 6 students) (Related item in 6.3)

With others, developed the outline for a new course: ITDPT 303: Manufacturing Systems (First implemented in Fall, 1998)

With others, developed the outline for a new course: ITEDU 306: Construction Systems (First implemented in Fall, 1998)

With others, developed the outline for a new course: ITDPT 203: Material Processing (First implemented in Fall, 1998)

With others, developed the outline for a new course: ITEDU 395: Teaching Technology (First implemented in Fall, 1998)

With others, developed the outline for a new course: ITEDU 206: Using and Assessing Technology (First implemented in Spring, 1999)

#### **5.5b Major course revision**

Proposed TMFG 495, Green Prototyping and Upcycling, as a University Core Curriculum course (Tier 2, Fine Arts / Design). Due to a moratorium on approval of new core courses, this course was not approved as part of the university core curriculum.

Redeveloped ITDPT 280, 3D Prototyping, approved as a University Core Curriculum course (Tier 2, Fine Arts / Design, WISER+ Technological Literacy).

Redeveloped ITEDU 206, Using and Assessing Technology, to become ITDPT 406, Technological Decision Making. This was approved as a University Core Curriculum course (Tier 2, Social Sciences, WISER+ Technological Literacy).

Revised ITEDU 690 for Internet delivery (Previously taught online by others, this was the first online implementation by this instructor in Fall, 2006)

Revised ITEDU 694 for 5-week delivery (Implementation Summer I, 2006)

Revised ITEDU 694 for Internet Delivery (Previously taught by others, the first online implementation by this instructor was in Spring, 2005)

Revised ITEDU 698 for Internet delivery (First online implementation: May, 2003)

Re-developed ITEDU 206 for Internet delivery (First delivered online in Fall, 2001)

5.6 **Student Ratings** (Submitted for annual reviews)

5.7 **Peer Evaluations** NONE

5.8 **Administrative Evaluation of Teaching** (Submitted for annual reviews)

5.9 **Workshops/activities attended related to improvement and/or enhancement of teaching** (Unless indicated by \*, item also appears in 6.7c)

Canvas Basics, September 4, 2018. BSU. (Local).

Canvas Assignments and Grades, September 4, 2018. BSU. (Local).

Migrating from Blackboard to Canvas, September 4, 2018. BSU. (Local).

Copyright, Fair Use, and Your Course Website. February 28, 2018. BSU. (Local).

Managing Media with MyMediaSite. October 22, 2014. BSU Libraries. (Local).

Mathematica in Education and Research. August 30, 2012. Presented by Wolfram Research, Inc.

BSU Blackboard Users Group. September 7, 2011; October 5, 2011; November 2, 2011.



Case in Point: Safe Assign. BSU. November 16, 2011. (Local).

Using Authentic Assignments to Assess Learning in Online Courses. BSU. November 15, 2011. (Local).

Workshop, Process Improvements - How to Streamline Work Processes. BSU. Oct. 25, 2011.

Workshop, Blackboard: Blogs, Discussion Boards, Journals, and Wikis. BSU. Sept 26, 2011.

Workshop, How to Use Social Media to Build Your Professional Network. BSU. September 20, 2011.

Workshop, Identifying Needs, Setting & Managing Multiple Priorities. BSU. September 8, 2011.

Emerging Media Faculty Symposium. Ball State University. April 25, 2011.

The state of diversified mentoring relationships at Ball State University, presented by Dr. Marcy Meyer, Department of Communication Studies, BSU. April 22, 2011.

Expanding the reach of your classroom: Experiencing videoconferencing as a teaching tool, presented by Dr. Ann Leitze, Department of Mathematical Sciences, BSU. March 31, 2011.

Developing Online Courses, Content Delivery & Instruction, Part 2. Innovation in Teaching, Assessment, and Scholarship, BSU. November 2, 2010. (Local).

Developing Online Courses, How Do I Begin. Innovation in Teaching, Assessment, and Scholarship, BSU. October 19, 2010. (Local).

Electronic Grade Submission. April, 2010. (Local)

Questioning Techniques to Activate & Assess Student Learning. Office of Teaching and Learning Advancement, BSU. February 16, 2010. (Local).

Blackboard: Q & A. University Libraries. September 30, 2009. (Local).

Blackboard 9 Preview. University Libraries. April 30, 2009. (Local).

Promoting Critical Thinking through Online Discussion Activities Workshop. Office of Teaching and Learning Advancement. Academic Research & Sponsored Programs. February 17, 2009. (Local).

Improving Objective Tests. Office of Teaching and Learning Advancement, BSU. October 15, 2008. (Local).

UCC-21 Proposal Writing Workshop – Tier 2. Office of Teaching and Learning Advancement, BSU. September 24, 2008. (Local).

Designing Hybrid Courses. Office of Teaching and Learning Advancement, BSU. November 14, 2007. (Local).

Enhancing Communication with Students via Technology. Office of Teaching and Learning Advancement, BSU. April 5, 2007. (Local).

MediaSite. Office of Teaching and Learning Advancement, BSU. November 8, 2006. (Local).

Interactive Training for Faculty Test Group. Indiana Higher Education Telecommunications System. Mar. 9, 2006. (Local).

Translating Difficult Concepts through Online Visuals. Indiana Higher Education Telecommunications System. Feb. 8, 2006. (State)

Learning Impacts of Instructional Technology. Office of Teaching and Learning Advancement, BSU. Feb. 3, 2006. (Local)

MediaSite. Office of Teaching and Learning Advancement, BSU. Jan 31, 2006. (Local)

Ladies and Gentlemen, Start Your Engines! Giving Faculty a Jump start into Online Course Development. Indiana Higher Education Telecommunications System. Jan. 11, 2006. (State)

Beyond Cheating. Indiana Higher Education Telecommunications System. Nov. 9, 2005. (State)

Increasing Attendance Without Taking Role. Office of Teaching and Learning Advancement, BSU. Oct. 7, 2005. (Local)

Macromedia Breeze in Indiana. Indiana Higher Education Telecommunications System. Sept. 14, 2005. (State)

Student Evaluation of Online Teaching, Teleconference. Oct. 13, 2004. (State)

FrontPage Interactivity Training. BSU. Feb. 4, 2004. (Local)

Discussion Activities in Blackboard Workshop. BSU. Sept. 29 – Oct. 1, 2003. (Local)

Integrating Multimedia in Blackboard Workshop. BSU. Sept. 23 - 25, 2003. (Local)

Communication Tools in Blackboard Workshop. BSU. Sept. 11, 2003. (Local)

InQsit New Features Workshop. BSU. Aug. 28, 2003. (Local)

FrontPage 2000 Advanced. April 4, 2001. BSU. (Local)

Microsoft FrontPage Workshop. Sep. 13, 2000. BSU. (Local)

Advanced PowerPoint Workshop. May 10 - 11, 2000. BSU. (Local)

Blackboard's CourseInfo Question and Answer Workshop. Jan 14, 2000. BSU. (Local)

JavaScript for Educators. Nov. - Dec., 1999. University of California, Los Angeles, Extension Service. (4 credit hour course). (International)

Blackboard's CourseInfo Workshop. Nov. 5, 1999. BSU. (Local)

Introduction to InQsit. Oct. 29, 1999. BSU. (Local)

Exemplary Models for Web-Based Learning. Oct. 7, 1999. Florida Community College at Jacksonville, Center for the Advancement of Teaching and Learning, Muncie, IN. (International)

Web Gradebook Training. Sept. 8, 1999. BSU. (Local)

Online Teaching and Learning Tools. May - June, 1999. University of California, Los Angeles, Extension Service. (4 credit hour course). (International)

InQsit Seminar. Mar. 1, 1999. BSU. (Local)

#### 5.10 Workshops Taught

**Flowers, J.** (February 22, 2018). CEO Workshop: Rapid Prototyping. Collegiate Entrepreneurship Organization, BSU

**Flowers, J.** (2011). More than just saving time in online teaching. (A video webinar). BSU Online Faculty Fellow Program. November 30, 2011.

**Flowers, J.** (2011). Saving time in online teaching. (A community of interest). BSU Online Faculty Fellow Program. September 21 through November 16, 2011.

**Flowers, J.** (2011). Adding online education to your research agenda. BSU Online Faculty Fellow Program. November 2, 2011.

**Flowers, J.** (2011). Case in point: Using the Blackboard discussion board. BSU. October 19, 2011.

**Flowers, J.** (2011). Promoting cognitive dialogue in online education. BSU Online Faculty Fellow Program. October 5, 2011. Archived at <http://mediasite.bsu.edu/bsu40/Viewer/?peid=5758862bc6134e999ef3df5264aa06361d>

**Flowers, J., Shafer, K., & Tancock, S.** (2011). Assessing student learning in online courses. A panel moderated by Linda Taylor. Innovation in Teaching, Assessment, and Scholarship, BSU. April 13, 2011.

**Flowers, J.** (2009). Forecasting. An online, interactive presentation to participants of EnviroTech (a workshop presented by Dr. M. A. Rose.) This session occurred on April 14, 2009.

**Flowers, J.** (2005). TLA 161, Pedagogies of Distance Education. Office of Teaching and Learning Advancement, BSU. Five sessions: October 5 through November 2, 2005.

**Flowers, J.** (2004). Using the Tablet PC in Your Classes. Faculty workshop sponsored by BSU University Computing Services, presented on June 16, 2004, and on July 16, 2004.)

**Flowers, J., Ali, N, Hodson-Carlton, K., Rose, M. A., Ryan, M. & Wayda, V.** (2003). Faculty ROLE (Faculty Researching OnLine Education). Open to faculty from the BSU College of Applied Sciences & Technology who Teach Online, supported by George & Frances Ball Foundation. (May 16– June 13, 2003) (Related item in 6.4)

**Flowers, J.** (2001). Web-integrated Instruction Workshop. Open to Department of Industry and Technology Faculty, supported by Technology Fellow program. (May, 2001) (Related item in 6.4)

**Flowers, J.** (2000). Using a 3D Laser Scanning. Open to Department of Industry and Technology Faculty. (Mar. 28, 2000)

**Flowers, J.** (2000). Laser Machining. Open to Department of Industry and Technology Faculty. (Mar. 24, 2000)

**Flowers, J.** (2000). Using Blackboard's CourseInfo. Open to Department of Industry and Technology Faculty. (Mar. 22, 2000 and Mar. 27, 2000)

**Flowers, J.** (1997). Construction technology workshop. Technology Education Teacher Enhancement Program, Central Connecticut State University.

5.11 **Portfolio** NONE

5.12 **Other teaching related activities**

BSU Creative Teaching Grant to develop a new undergraduate and a new graduate course in Green Prototyping and Upcycling, developed in part in Fall 2014 to be first implemented in Spring 2015

Proposed ITMFG 585, Inquiries into 3D Prototyping, as a new graduate course, 10/30/09.

Redeveloped ITEDU 206, Using and Assessing Technology, to become ITDPT 406, Technological Decision Making, and submitted this 8/20/08 as a University Core Curriculum course (Tier 2, Social Sciences, WISER+ Technological Literacy, Environment.

Redeveloped ITDPT 299X, Ideas to Products: 3D Prototyping to become ITDPT 280, 3D Prototyping, and submitted this 8/20/08 as a University Core Curriculum course (Tier 2, Fine Arts / Design, WISER+ Technological Literacy.

6. **Scholarly Productivity: Research, Creative Endeavors, Professional Development**

6.1 **Publications**

6.1a **Refereed Articles**

### 6.1a1 Refereed Articles in Print

**Flowers, J., Rauch, C.\*, & Wierzbicki, A.\*** (2018). Teaching upcycling to impact environmental attitudes. *Journal of Technology Education*, 30(1), 30-45.

**Flowers, J. & Gorski, A.\***, (2017). Upcycle! *Technology and Engineering Teacher*, 76(6), 8-12.

**Flowers, J.** (2016). Intersecting silhouettes. *Technology & Engineering Teacher, Electronic Supplement*, 75(8), 1-8. (International)

Xu, R., & **Flowers, J.** (2015). Integrating rapid prototyping into graphic communications. *Technology and Engineering Teacher*, 75(3).

Orr, T.\*, & **Flowers, J.** (2015). Learning through plastic filament extrusion. *Technology and Engineering Teacher*, 74(8), 22-25.

Samuels, K.\*, & **Flowers, J.** (2015). 3D printing: Exploring capabilities. *Technology and Engineering Teacher*, 74(7), 17-21.

**Flowers, J.** (2014). Don't struggle with usability testing. *Technology and Engineering Teacher*, 74(2), 18-22.

**Flowers, J. & Rose, M. A.** (2014). Mathematics in technology & engineering education: Judgments of grade-level appropriateness. *Journal of Technology Education*, 25(2), 18-34. Retrieved from <http://scholar.lib.vt.edu/ejournals/JTE/v25n2/pdf/flowers.pdf>

Orr, T.\*, & **Flowers, J.** (2014). An experimental approach to... everything! *Technology & Engineering Teacher*, 73(8), 8-12.

Lazaros, E., & **Flowers, J.** (2014). Keys to succeeding in a master's program: Advice from 21 technology education graduate advisors / faculty. *Technology and Engineering Teacher*, 73(5), 34-39.

Xu, R., Londt, S.\*, & **Flowers, J.** (2013). The effects of laser-engraving settings on cliché etch depth and pad printing quality. *Journal of Print and Media Technology Research*, 2(1), 29-35.

**Flowers, J., & Lazaros, E.** (2013). Where to earn a master's degree. *Technology & Engineering Teacher Electronic Supplement*, 72(8), 1-16.

Pearsall, C., Hodson Carlton, K., & **Flowers, J.** (2012). Barriers & strategies towards the implementation of a full-time faculty-at-a-distance nurse educator. *Nursing Education Perspectives*, 33(6), 399-405.

Flowers, J. & Hunt, B.\* (2012). Historiography in graduate technology teacher education. *The Journal of Technology Studies*, 38(1), 2-11.

Xu, R., **Flowers, J.** (2011). Engineering a greener process: Laser cutter transforms printing waste. *Tech Directions*, 71(2), 20-23.

**Flowers, J.**, & Xu, R. (April, 2011). Exploring a connection: Prototyping graphic image carriers. *Technology and Engineering Teacher e*, 70(7), 1-6 [Electronic supplement to *Technology and Engineering Teacher*].

**Flowers, J.** (2010). *The problem in technology education (a definite article)*. *Journal of Technology Education*, 21(2), 10-20. Retrieved from <http://scholar.lib.vt.edu/ejournals/IJE/v21n2/pdf/flowers.pdf>

**Flowers, J.**, & Lazaros, E. (2009). Contemplate doctoral study. *The Technology Teacher*, 69(3), 25-30.

Baltzer, H.\*, Lazaros, E., & **Flowers, J.**, (2007). Review of doctoral programs in technical education. *J. of Industrial Teacher Education*, 44(2), 37-59. Retrieved October 2, 2008 from <http://scholar.lib.vt.edu/ejournals/IITE/v44n2/pdf/baltzer.pdf> (National)

**Flowers, J.**, & Cotton, S. (2007). Impacts of student categorization of their online discussion contributions. *American J. of Distance Education*, 21(2), 93-104. (Related item 6.1b, 6.2a) (International)

**Flowers, J.**, & Baltzer, H.\* (2006). Perceived demand for online and hybrid doctoral programs in technical education. *J. of Industrial Teacher Education*, 43(4), 39-56. (Published February, 2007). Retrieved September 17, 2007 from <http://scholar.lib.vt.edu/ejournals/IITE/v43n4/pdf/flowers.pdf> (National)

**Flowers, J.**, & Baltzer, H.\* (2006). Hiring technical education faculty: Vacancies, criteria, and attitudes toward online doctoral degrees. *J. of Industrial Teacher Education*, 43(3), 29-44. Retrieved September 17, 2007 from <http://scholar.lib.vt.edu/ejournals/IITE/v43n3/pdf/flowers.pdf> (National)

**Flowers, J.** (2005). The effect of online delivery on graduate enrollment. *J. of Industrial Teacher Education*, 42(4), 7-24. (published April, 2006). Retrieved April

23, 2007 from <http://scholar.lib.vt.edu/ejournals/JITE/v42n4/pdf/flowers.pdf> (National)

**Flowers, J.** (2005). Usability testing in technology education. *The Technology Teacher*, 64(8), 17-19.

Ali, N. S., Hodson-Carlton, K., Ryan, M., **Flowers, J.**, Rose, M. A., and Wayda, V. (2005). Online education: Needs assessment for faculty development. *J. of Continuing Education in Nursing*, 36(1), 32-38. Retrieved Jan. 28, 2005 from <http://proquest.umi.com/pqdlink?index=9&did=782490161&SrchMode=3&sid=1&Fmt=6&VInst=PROD&VType=PQD&RQT=309&VName=PQD&TS=1106919105&clientId=3278> (International)

**Flowers, J., & Moniz, M.\*** (2002). Rapid prototyping in technology education. *The Technology Teacher*, 62(3), 7-11. (Related items in 6.2a) (International)

**Flowers, J.** (2001). Online learning needs in technology education. *J. of Technology Education*, 13(1), 17-30. Retrieved October 4, 2006 from <http://scholar.lib.vt.edu/ejournals/JTE/v13n1/pdf/flowers.pdf> (International)

**Flowers, J.** (2001). The value of humor in technology education. *The Technology Teacher*, 60(8), 10-13. (International)

**Flowers, J.** (2000). 3D laser scanning in technology education. *The Technology Teacher*, 60(3), 27-30. (International)

**Flowers, J.** (2000). Laser machining in technology education. *The Technology Teacher*, 59(8), 7-11. (Related item in 6.2a) (International)

**Flowers, J.** (2000). Activities that teach about using technology. *TTTe*. Retrieved April 21, 2000, from the World Wide Web: <http://www.iteawww.org/F3w.html> (International)

**Flowers, J.** (1999). An outline for the study of using technology. *J. of Industrial Technology*, 15(2). Retrieved February 5, 1999: <http://nait.org/jit/Articles/flow0299.pdf> (International)

**Flowers, J.** (1998). Photography: An integrated technology education approach. *The Technology Teacher*, 58(3), 23-26. (International)

**Flowers, J.** (1998). Improving female enrollment in tech ed. *The Technology Teacher*, 58(2), 21-25. (International)



**Flowers, J.** (1998). Problem solving in technology education: A Taoist perspective. *J. of Technology Education*, 10(1), 20-26. (International) Retrieved from <http://scholar.lib.vt.edu/ejournals/JTE/v10n1/pdf/flowers.pdf>

**Flowers, J., & Rose, M. A.** (1998). Mirror, mirror, on the wall. *The Technology Teacher*, 57(5), 32-34. (International)

**Flowers, J.** (1997). A seamless transition from the community college to the university. *J. of Industrial Technology*, 13(2), 40-41. (International)

**Flowers, J.** (1995). Overcoming the barriers: Technology education as a career choice for women. *J. of Women and Minorities in Science and Engineering* 2(1&2), 17-32. (Related item in 6.1b, 6.1e) (International)

**Flowers, J.** (1994). Attention to language: Tips for technology teachers. *The Technology Teacher*, 53(5), 27-30. (International)

**Flowers, J.** (1994). Applied philosophy in technology education. *The Technology Teacher* 53(4), 6-7. (International)

**Flowers, J.** (1992). Contrasting approaches to the determination of curriculum. *The Technology Teacher*, 51(8), 29-31. (International)

Gardner, D., **Flowers, J.**, & Elder, T. (1992). Microscopic characteristics of filled and extended phenol-formaldehyde resin adhesive bonds. *J. of Adhesion Science and Technology*, 6(10), 1147-1156. (International)

**Flowers, J.**, Hassler, C. & Luppold, W. (1990). Utilization of yellow-poplar in the architectural moulding and millwork industry. *Forest Products J.*, 40(10), 35-38. (International)

#### 6.1a2 Refereed Articles in Press

- 1 **Flowers, J., Rose, M. A.** (In Press). Stereolithography grows experimenters. *Technology and Engineering Teacher*.
- 2 **Flowers, J.** (In Press). Teach wood science. *Technology and Engineering Teacher*.

#### 6.1a3 Refereed Articles Submitted

## 6.1b Conference Proceedings

Xu, R., Londt\*, S. C., **Flowers, J.** (2011). Print quality of laser-engraved clichés for pad printing. (pp. 100-108). Sewickley, PA: *Proceedings of TAGA 63rd Annual Technical Conference*.

Rose, M.A. & **Flowers, J.** (2008). Technology assessment: A graduate course to build decision-making skills. *Proceedings of the 2008 Conference of the American Society for Engineering Education*. [Note, this item is also listed in 6.1 a because the Department of Technology considers ASEE proceedings to also be refereed articles.]

Xu, R. & **Flowers, J.** (2008). Flexographic platemaking using rapid prototyping technologies, *Proceedings of TAGA 60<sup>th</sup> Annual Technical Conference*, TAGA Press, Rochester, NY. , pp. 1-11. [This item was also published elsewhere as a non-refereed article, See 6.1d.]

**Flowers, J.**, & Cotton, S. (2006). *Student self review: Impacts on future class discussion*. Paper presented at the 22<sup>nd</sup> Annual Conference on Distance Teaching and Learning, Madison, WI. Retrieved from [http://www.uwex.edu/disted/conference/Resource\\_library/proceedings/06\\_4028.pdf](http://www.uwex.edu/disted/conference/Resource_library/proceedings/06_4028.pdf). (Related item: 6.1a, 6.2a) (International, Competitive.)

Rose, M. A., & **Flowers, J.** (2003). *Assigning learning roles to promote critical discussions during problem-based learning*. Paper presented at the 19<sup>th</sup> Annual Conference on Distance Teaching and Learning, Madison, WI. Retrieved from [http://www.uwex.edu/disted/conference/Resource\\_library/resource\\_library.htm](http://www.uwex.edu/disted/conference/Resource_library/resource_library.htm). (Related item: 6.2a) (International, Competitive.)

**Flowers, J.** (1998). *Curriculum, methods, and males: Problems and solutions to low female enrollment in college and pre-college technological courses*. WEPAN 1998 Conference Proceedings: Women in Engineering Conference, June 14-16, 1998, Seattle, WA. (Related item: 6.2a) (International, Competitive)

Kaufman, A., & **Flowers, J.** (1996). *Low cost activities for technology education* [Monograph]. The Technology Bank (No. 96-492). Reston, VA: International Technology Education Association. (Related item: 6.1e) (International, Competitive)

**Flowers, J.** (1995). *Women in technology: Increasing the number of female teachers and students*. WEPAN 1995 Conference Proceedings: Women in Engineering Conference, June 4-6, 1995, Wash., DC. (International, Competitive)

**Flowers, J.** (1995). *Women in technology education: Overcoming the obstacles* [Monograph]. The Technology Bank (No. 95-469). Reston, VA: International Technology Education Association. (Copyright not transferred.) (Related item in 6.1a, 6.1e) (International, Competitive)

**Flowers, J.** (1994). *Ideation techniques: Brainstorming and beyond* [Monograph]. The Technology Bank (No. 94-365). Reston, VA: International Technology Education Association. (Related item in 6.1e) (International, Competitive)

Kaufman, A., & **Flowers, J.** (1994). *Solar electricity: Technical developments and teaching strategies* [Monograph]. The Technology Bank (No. 94-366). Reston, VA: International Technology Education Association. (International, Competitive)

**Flowers, J.** (1993). *Language in technology education* [Monograph]. The Technology Bank (No. 93-273). Reston, VA: International Technology Education Association. (International, Competitive)

Gardner, D., Elder, T., Waage, S., & **Flowers, J.** (1990). Bonding flakeboard with filled and extended phenol-formaldehyde. *1990 Wood Adhesive Symposium Proceedings*. Forest Products Research Society, Madison, WI. (International, Competitive)

6.1c **Published Abstracts** NONE

6.1d **Non-Refereed Articles**

**Flowers, J.** (Withdrawn, Submitted May 6, 2015). Will you play a question game? Magna's Online Classroom Newsletter.

**Flowers, J.** (2014). Use a laser cutter/engraver to create intricate inlays. *TechDirections Magazine*, 74(1), 14-17.

Xu, R. & **Flowers, J.** (2009). Flexographic platemaking using rapid prototyping technologies. *FlexoGlobal*, 2(1), 24-30. [This item was also published in a conference proceedings, See 6.1b.]

Cotton, S., & **Flowers, J.** (2006). Online master's degree in CTE from Ball State. *News & Views*, 4(1), 4. Retrieved from <http://doe.state.in.us/octe/facs/iacteNews-Nov06.pdf>

**Flowers, J.** Cotton, S. E. (2003). Master of Arts in Career and Technical Education-Now 100% Online. *TechDirections*, 63(2), 22-23.

**Flowers, J., & Rose, M. A. (2002).** Under review - *Educating Teachers of Science, Mathematics, and Technology: New Practices for the New Millennium. Journal of Industrial Teacher Education, 39(3)*, 146-153. (Appeared February, 2004) retrieved from <http://scholar.lib.vt.edu/ejournals/IITE/v39n3/flowers.html> [Note, this is a book review, so the title begins with, "Under review."] (National)

**Flowers, J., (2003).** Under review - *Handbook of Distance Education. Journal of Industrial Teacher Education, 40(4)*, 64-72. (Appeared January, 2004) [Note, this is a book review, so the title begins with, "Under review."] (National)

**Flowers, J., & Scheetz, D.\* (2002).** A Master of Arts in Tech Ed: Finally online. *Tech Directions, 62(3)*, 35-36. (International) (Related item: 6.1d)

Scheetz, D.\*, & **Flowers, J. (2002).** Ball State University begins offering an online master's degree in Technology Education. *The Journal of the Technology Educators of Indiana, 15*, 17. (State) (Related item: 6.1d)

**Flowers, J., & Kirkwood, J. (2002).** Now on the Web: Elementary technology education for teachers. *Technology and Children, 6(3)*, 9-10. (International)

**Flowers, J. (1998).** Rapid prototyping, reverse engineering, and MIDI. *Technology Education Report, 10(2)*, 26-27. (State)

**Flowers, J. (1997).** Teaching the historical perspective - Should we or shouldn't we? *The Technology Teacher, 57(4)*, 7-8. (International)

**Flowers, J. (1997).** Tips for grouping students. *Technology Education Report, 9(2)*, 11-12. (State)

Kaufman, A., & **Flowers, J. (1996).** Trash bag balloon: Introducing aircraft to elementary tech ed students. *Tech Directions, 56(5)*, 14-15. (Reprint from book) (Related item in 6.1e) (International)

**Flowers, J. (1996).** Overlooked technologies. *Tech Directions, 56(4)*:39-40. (International)

**Flowers, J. (1995).** Technology education enrollment up 6% in Virginia. *Technology Trends of Virginia, Fall*: 2-4. (State)

**Flowers, J. (1994).** Female and total enrollment in technology education in Virginia. *Technology Trends of Virginia Fall*: 2-14. (State)

**Flowers, J.** (1993). Resources in technology: Technology of music. *The Technology Teacher*, 52(7), 9-26. (Identical item in 6.1e) (International)

#### 6.1e Books, Chapters in Books

**Flowers, J.** (2019). Using 3D printers to engage students in research. In I. Santos, N. Ali, & S. Areepattamannil (Eds.), *Interdisciplinary and International Perspectives on 3D Printing in Education*. Hershey, PA: IGI Global. (refereed)

**Flowers, J.** (manuscript completed, unpublished). *STEM Scrap Paper Projects*.

**Flowers, J.** (manuscript completed, unpublished) *The selfish professor*.

**Flowers, J.** (2005). Ideation: It's more than just brainstorming. In D. Reddy (Ed.), *Creativity at workplace: An introduction* (pp. 29–42). Hyderabad, India: ICFAI University Press. (Related item in 6.1b)

**Flowers, J.** (2005). Lessons to consider: Distance and distributed learning environments from student and faculty perspectives. In W. L. Havice & P. A. Havice (Eds.), *Distance and distributed learning environments: Perspectives and strategies: 54th yearbook of the Council on Technology Teacher Education* (pp. 165-188) New York: Glencoe McGraw-Hill.

Hodson Carlton, K. E., Sitkberg, L. L., **Flowers, J.** & Scheibel, P. (2003). Overview of distance education in nursing: Where are we now and where are we going? In M. H. Oermann & K. T. Heinrich (Eds.), *Annual Review of Nursing Education: Vol. 1* (pp. 165-189). New York: Springer.

Kaufman, A., & **Flowers, J.** (2000). *More technology projects for the classroom*. (With teacher's guide). Ann Arbor, MI: Prakken. (International, Non-Competitive)

Kaufman, A., & **Flowers, J.** (1996). *Technology projects for the classroom*. (With teacher's guide). Ann Arbor, MI: Prakken. (Related item in 6.1d) (International, Non-Competitive)

**Flowers, J.** (1996). *Female educators and students assess gender equity in technology education*. Glen Allen, VA: Virginia Vocational Curriculum and Resource Center. (Note: this edited executive summary reports on the same study as two referred articles - Related items in 6.1a, 6.1b) (International, Non-Competitive)

**Flowers, J. & Ritz, J. (1994).** *Cooperative learning in technology: Monograph 13.* Virginia Council on Technology Teacher Education. Richmond, VA: Technology Education Service, Virginia Department of Education. (State, Non-Competitive)

**Flowers, J. (1993).** Resources in technology: Technology of music. *Resources in Technology, Volume 10* (pp. 17-24). Reston, VA: International Technology Education Association. (Note, this volume is a compilation of articles previously printed in *The Technology Teacher*.) (Identical item in 6.1d) (International, Non-Competitive)

**Flowers, J. (1990).** The effect of board grade on yellow-poplar millwork cutting yield. Unpublished doctoral dissertation, West Virginia University, Morgantown.

**Flowers, J. (1986).** A survey of modern lute construction techniques for the novice. Unpublished master's project report, West Virginia University, Morgantown.

## 6.2. Presentations (posters/papers presented to professionals within the discipline)

### 6.2a Refereed

**Flowers, J. (2018).** Fifty STEM activities using scrap paper. International Technology and Engineering Education Association Annual Conference. April 12, 2018. Atlanta, GA. (International)

**Flowers, J., & Wierzbicki, A. (2018).** Students extrude their own 3D printer filament. International Technology and Engineering Education Association Annual Conference. April 12, 2018. Atlanta, GA. (International)

**Flowers, J. (2017).** Teaching green prototyping and upcycling. Technology Education Conference, SUNY College at Oswego, October 27, 2017, Oswego, NY. (State)

**Flowers, J., Rauch, C., & Wierzbicki, A. (2017).** Teaching upcycling and changing environmental attitudes. Council on Technology and Engineering Teacher Education Conference at the International Technology and Engineering Education Association Annual Conference. March 16, 2017. Dallas, TX. (International)

**Flowers, J., Richman, W., & Gorski, A. (2016).** New course: Green prototyping and upcycling. International Technology and Engineering Education Association Annual Conference. March 2, 2016. National Harbor, MD. (International)

- Flowers, J.** (2015). Experimenting with laser cutters and rapid prototypers. International Technology and Engineering Education Association Annual Conference. March 26, 2015. Milwaukee, WI. (International)
- Flowers, J.** (2014). Experimenting with Rapid Prototyping and something called Custom Intersections. Technology Education Conference, SUNY College at Oswego, October 30, 2014, Oswego, NY. (State)
- Flowers, J.** (2014). Will you play a question game? 30<sup>th</sup> Annual Conference on Distance Teaching & Learning. August, 14, 2014, Madison, WI. (International)
- Xu, R., & Flowers, J.** (2014). Integrating 3D printing and laser engraving into the graphic communications curriculum. 89<sup>th</sup> Annual Conference of the International Graphic Arts Education Association. July 23, 2014. Shelby, OH. (International)
- Flowers, J.** (2014). Technology Education Master's Programs and Advisors' Recommendations. Council on Technology & Engineering Teacher Education at the International Technology and Engineering Education Association Annual Conference. March 27, 2014. Orlando, FL. (International)
- Flowers, J., Rose, M. A.** (2013). Judgments of Mathematics Grade Level in Technology. International Technology and Engineering Education Association Annual Conference, March 7, 2013, Columbus, OH. (International)
- Flowers, J., Rose, M. A.** (2012). Assessing Impacts of Technological Decisions. International Technology and Engineering Education Association Annual Conference, March, 2012, Long Beach, CA. (International)
- Flowers, J., Pearsall, C., & Hodson Carlton, K.** (2011). Overcoming Perceived Barriers to Enfranchising Remote Faculty. 17<sup>th</sup> Sloan Consortium International Conference on Online Learning. Lake Buena Vista, FL. Nov. 9, 2011. (International)
- Flowers, J.** (2011). Discussing Suggestions for Self-Mentoring. Lilly Conference on College and University Teaching. Traverse City, MI. September 24, 2011. (International)
- Flowers, J.** (2011). *The Problem in Technology Education.* International Technology and Engineering Education Association Annual Conference, March 26, 2011, Minneapolis, MN. (International)
- Xu, R., Londt, S., & Flowers, J.** (2011). Print quality of laser-engraved clichés for pad printing. TAGA 63<sup>rd</sup> Annual Technical Conference of the Technical Association of the Graphic Arts (TAGA), March 7, 2011, Pittsburgh, PA. (International)

**Flowers, J.** (2010). Humor in Technology Education. Technology Education Conference, SUNY College at Oswego, October 28, 2010, Oswego, NY. (State)

**Pearsall, C., Hodson Carlton, K., & Flowers, J.** (2010). From a distance: Overcoming barriers to enfranchising distance faculty. National League for Nursing Education Summit, Las Vegas, NV, October 1, 2010. (National)

**Xu, R. & Flowers, J.** (2010). Computer to plate/screen using a laser engraver, 85<sup>th</sup> IGAEA Conference, Normal, IL, July 25-29, 2010. (International)

**Rose, M. A., & Flowers, J.** (2010). Extending the trend. International Technology and Engineering Education Association Annual Conference, March 18, 2010, Charlotte, NC. (International)

**Flowers, J.** (2010). Teaching historiography. International Technology and Engineering Education Association Annual Conference, March 18, 2010, Charlotte, NC. (International)

Pearsall, C., **Flowers, J.**, & Hodson Carlton, K. (2009). FD Model: Overcoming attitudinal and infrastructure barriers to enfranchise remote faculty. Distance Teaching and Learning 2009 Conference, Madison, WI. August 6, 2009. (International)

**Flowers, J.** (2009). Usability engineering research that students can do. International Technology Education Association Annual Conference, March 27, 2009, Louisville, KY. (International)

**Rose, M. A., & Flowers, J. C.** (2008). A graduate course to build decision-making skills. American Society for Engineering Education Annual Conference, Pittsburgh, PA, June 22-25, 2008. (National)

**Xu, R. & Flowers, J. C.** (2008). Flexographic platemaking using rapid prototyping technologies. TAGA 60<sup>th</sup> Annual Technical Conference, San Francisco, CA, March 16-19, 2008. (International)

**Flowers, J., Lazaros, E., & Baltzer, H.** (2008). Variety among technical / technology education doctoral programs. International Technology Education Association Annual Conference, February 21, 2008, Salt Lake City, UT. (International)

**Flowers, J.** (2007). Are we ready for online doctorates? Association for Career and Technical Education Annual Convention, December 14, 2007, Las Vegas, NV.



(International)

**Flowers, J.** (2007). Demand vs. hiring attitudes for online doctoral technical education. Distance Teaching and Learning 2007 Conference, Madison, WI. August 10, 2007. (International)

**Flowers, J.** (2007). A choice for doctoral education?. International Technology Education Association Annual Conference, March 15, 2007, San Antonio, TX. (International)

**Flowers, J. & Cotton, S.** (2006). Student self-review: impacts on future class discussion. Distance Teaching and Learning 2006 Conference, Madison, WI. August 4, 2006. (International)

**Flowers, J.** (2006). Student-developed usability tests. International Technology Education Association Annual Conference, March 24, 2006, Baltimore, MD. (International)

**Flowers, J.** (2005). Helping students perform formal technology assessments. International Technology Education Association Annual Conference, April 4, 2005, Kansas City, MO. (International)

**Flowers, J.** (2004). The effect of online delivery on enrollment in a master's in Technology Education. March 20, 2004. 66<sup>th</sup> Annual Conference, International Technology Education Association, Albuquerque, NM. Poster Session. (International)

**Flowers, J., & Cotton, S.** (2003). Three tools of online career and technical education. Association for Career and Technical Education Annual Convention, December 13, 2003, Orlando, FL. (International)

**Flowers, J.** (2003). Two online masters: Lessons learned. Association for Career and Technical Education Annual Convention, December 11, 2003, Orlando, FL. (International)

**Rose, M., & Flowers, J.** (2003). Assigning learning roles to promote critical discussion during problem-based learning. 19<sup>th</sup> Annual Conference on Distance Teaching & Learning. August, 2003, Madison, WI. (International) (Related item in 6.1b)

**Rose, M., & Flowers, J.** (2003). Cognitive role assignment in an online problem-based technology assessment activity. International Technology Education Association Annual Conference, March, 2003, Nashville, TN. (International)

**Flowers, J.** (2003). Online technology education masters: Year one update. International Technology Education Association Annual Conference, March, 2003, Nashville, TN. (International)

**Flowers, J.** (2003). Teaching with reusable HTML learning objects. Midwest Educational Technology Conference, January 28, 2003, St. Louis, MO. (Regional)

**Flowers, J.** (2002). Online course showcase: Technology: Use and assessment. 18<sup>th</sup> Annual Conference on Distance Teaching & Learning, August, 2002, Madison, WI. Poster Session. (International) (Related item in 6.2a)

**Rose, M., & Flowers, J.** (2002). Problem-based learning in an online course on technology assessment. International Technology Education Association Annual Conference, March, 2002, Columbus, OH. (International)

**Flowers, J., & Kirkwood, J.** (2002). Developing an online master's in technology education. International Technology Education Association Annual Conference, March, 2002, Columbus, OH. (International) (Related item in 6.2a)

**Flowers, J.** (2001). Reusable learning objects in Web-assisted and Web-delivered instruction. Association for Career and Technical Education Annual Convention, December 13-16, 2001, New Orleans, LA. (International)

**Flowers, J., & Cotton, S.** (2001). 3D laser imaging and rapid prototyping. Association for Career and Technical Education Annual Convention, December 13-16, 2001, New Orleans, LA. (International) (Related items in 6.1a, 6.2a)

**Flowers, J.** (2001). Simple 2D & 3D rapid prototyping and reverse engineering. National Association of Industrial Technology Annual Convention, November 2, 2001, Dearborn, MI. (National) (Related items in 6.1a, 6.2a)

**Flowers, J.** (2001). Development of an online master's program. National Association of Industrial Technology Annual Convention, November 1, 2001, Dearborn, MI. (National) (Related item 6.3a)

**Flowers, J.** (2001). Online reusable learning objects. Ball State University Teaching & Learning Conference, III - Transforming Teaching and Learning, March 17, 2001. Muncie, IN. (National)

**Flowers, J.** (2001). Survey results: Online technology education learning needs. International Technology Education Association Annual Conference, Atlanta, GA. (International) (Related items in 6.1a, 6.4, 7.1a, 7.3)

**Flowers, J.** (2001). Graduate online course: Technology - Use & Assessment. International Technology Education Association Annual Conference, Atlanta, GA. (International) (Related item in 6.2a)

**Flowers, J.** (2000). *Laser Machining in Technology Education*. 19<sup>th</sup> International Congress on Applications of Lasers & Electro-Optics. Dearborn, MI. Poster Session. (This presentation won third place out of 40 poster presentations.) (Related item in 6.1a) (International)

**Flowers, J.** (2000). Rapid prototyping. International Technology Education Association Annual Conference, Salt Lake City, UT. (International)

**Flowers, J.** (2000). Helping students generate creative ideas. Lilly Conference West on College and University Teaching, Lake Arrowhead, CA. (Regional)

**Flowers, J.** (1998). Collaborative web site development fosters networking. National Association of Industrial Technology Annual Convention, Indianapolis, IN. (National)

**Flowers, J.** (1998). Curriculum, methods and males: Problems and solutions to low female enrollment in college and pre-college technological courses. Women in Engineering Program and Advocates Network Annual Conference, Seattle, WA. (Related item: 6.1b.) (International)

**Flowers, J.** (1998). Women's Creative Connection: Creating a web site to highlight women artists. Marquette University Purdue University Women's Studies Conference, Milwaukee, WI. (International)

**Flowers, J.** (1998). Toward sex-fair technology education. Purdue University Women's Studies Symposium, West Lafayette, IN. (International)

**Flowers, J.** (1998). A web site created to highlight female artists and their work. Purdue University Women's Studies Symposium, West Lafayette, IN. (International)

**Flowers, J.** (1998). Humor in your classroom. International Technology Education Association Annual Conference, Fort Worth, TX. (International)

**Flowers, J., & Rose, M. A.** (1997). Origami line production. Technology Educators of Indiana Annual Conference, Brown County, IN. (State)

**Kaufman, A., & Flowers, J.** (1996). Low cost activities for technology education. International Technology Education Association Annual Conference, Phoenix, AZ. (International)

**Flowers, J.** (1995). Teacher enhancement programs for K-12: Women in technology - Increasing the number of female teachers and students. Women in Engineering Program Advocates Network Annual Conference, Washington, DC. (International)

**Flowers, J.** (1995). Technology teacher education revitalization: Women and technology education. International Technology Education Association Annual Conference, Nashville, TN. (International)

**Flowers, J.** (1995). Survey results: Women in technology education -- Overcoming the obstacles. International Technology Education Association Annual Conference, Nashville, TN. (International)

**Flowers, J.** (1994). Ideation techniques: Brainstorming & beyond. International Technology Education Association Annual Conference, Kansas City, MO. (International)

**Kaufman, A., & Flowers, J.** (1994). Solar electricity: Technical developments & teaching strategies. International Technology Education Association Annual Conference, Kansas City, MO. (International)

**Flowers, J.** (1993). Language in technology education. International Technology Education Association Annual Conference, Charlotte, NC. (International)

**Flowers, J.\***, Gardner, D. & Waage, S. (1990). *Scanning electron microscopic investigation of clay, wheat & pecan shell flour filled phenol-formaldehyde resin-adhesive systems*. Poster Session. Forest Products Research Society Annual Conference, Salt Lake City, UT. (International)

**Flowers, J.\***, Hassler, C. & Luppold, W. (1990). A survey of the architectural millwork industry. Forest Products Research Society Annual Conference, Salt Lake City, UT. (International)

Gardner, D., Elder, T., Waage, S., & **Flowers, J.\*** (1990). Bonding flakeboard with filled and extended phenol-formaldehyde resin. 1990 Wood Adhesives Symposium, Madison, WI. (International)

**Rose, M. & Flowers, J.** (1982). Non-sexist industrial arts. American Industrial Arts Association Annual Conference, Hartford, CT. (National)

## 6.2b Invited

**Flowers, J.,** Rauch, C., & Wierzbicki, A. (2017). Tech fest: Green prototyping and upcycling. International Technology and Engineering Education Association Annual Conference. March 16, 2017. Dallas, TX. (International)

**Flowers, J.,** (2015). Creative Teaching Grant: Green Prototyping & Upcycling. BSU Office of Educational Excellence. April 22, 2015. Muncie, IN. (Internal)

**Flowers, J.,** (2015). Intersecting silhouettes. International Technology and Engineering Education Association Annual Conference. March 26, 2015. Milwaukee, WI. (International)

**Flowers, J.** (2014). Keynote Panel Presentation: Adult and Higher Education Policy, Future Trends, Benefits, Challenges, Recommendations, and Call to Action: R2p or not R2P. 33<sup>rd</sup> National Research-to-Practice (R2P) Conference in Adult and Higher Education with Ball State University's 2<sup>nd</sup> Annual Adult, Higher, and Community Education Research Conference, Muncie, IN. Sept. 19, 2014.

**Elvin, G., Johnson, J., & Flowers, J.** (2006). Creative faculty uses of Breeze. Second Wednesdays @ Noon, Virtual Brownbag, Indiana Higher Education Telecommunication System, Indianapolis, Indiana. October 3, 2006. The audio/video recording can be seen at <http://interactive.ihets.org/p14204887/> (State, Non-Competitive)

**Flowers, J.** (2006). Improving engagement through a learning objects approach [New, live streaming video reprise of April 12, 2005 conference presentation]. Second Wednesdays @ Noon, Virtual Brownbag, Indiana Higher Education Telecommunication System, Indianapolis, Indiana. April 12, 2006. The audio/video recording can be seen at <http://interactive.ihets.org/p16036221/> (State, Non-Competitive)

**Flowers, J.** (2006). Teaching reverse engineering and digital fabrication. ATAIN Conference: Digital Fabrication: Focus on Indiana. Muncie, IN. March 27, 2006. time 36:50 of [http://mediaserver.ihets.org/vod/iin/iin\\_2.wmv](http://mediaserver.ihets.org/vod/iin/iin_2.wmv). (State, Non-Competitive)

**Flowers, J.** (2005). Improving engagement through a learning objects approach. All-Partner's Conference, Indiana Higher Education Telecommunication System, Indianapolis, Indiana. April 15, 2005. (State, Non-Competitive)

**Flowers, J.** (2004). An approach to usability education. Indiana Chapter, Usability Professionals Association. October 11, 2004. (State, Non-Competitive)

**Flowers, J.** (2003). View from a successful recipient and reviewer, Ins and Outs of IHETS. Ball State University, Muncie, IN. (State, Non-Competitive)

**Flowers, J.** (2002). Repurposeable HTML learning objects, Technology Day, Ivy Tech State College, Bloomington, IN. (State, Non-Competitive)

**Flowers, J.** (2002). **Keynote Speaker:** A little humor in our teaching, Ivy Tech State College, Region 5 Technology Employees Banquet. Kokomo, IN. (State, Non-Competitive)

**Flowers, J.** (2001). **Keynote Speaker:** The value of humor in technology education. Council for Leadership Forum, Technology Education Association of Pennsylvania, November 8, 2001, Camp Hill, PA. (State, Non-Competitive)

**Flowers, J. & Musselman, L.\*** (1997). From World War II to the World Wide Web: Using technology to connect the experiences of women. Ball State University's Women's Week, Muncie, IN. (Local, Non-Competitive)

**Flowers, J.** (1997). Construction technology workshop. Technology Education Teacher Enhancement Program, Central Connecticut State University. (State, Non-Competitive)

**Flowers, J.** (1996). **Keynote Speaker:** Opening the doors to technology education. Technology Education Collegiate Association Midwest Regional Conference, Indianapolis, IN, Oct., 1996. (Regional, Non-Competitive)

**Flowers, J.** (1996). Cross-gender professionalism. **Keynote** speaker at Technology Education Collegiate Association Eastern Regional Conference, Virginia Beach, VA, Feb., 1996. (Regional, Non-Competitive)

**Flowers, J.** (1994). Gender equity in technology education: Attitudes of female technology education teachers in Virginia and internationally. Southeast Technology Education Conference. Boone, NC, Oct., 1994. (Regional, Non-Competitive)

**Flowers, J.** (1982). Technology education forum. (Panel member). American Industrial Arts Association Annual Conference, Hartford, CT. (National, Non-Competitive)

## 6.2c Non-Refereed

**Flowers, J.** (2013). Why teachers struggle with usability testing. World Usability Day 2013, Indiana Chapter of the Usability Professionals Association, Indianapolis, IN, Nov. 14, 2013. (State, Non-Competitive)

**Flowers, J.** (2012). Special assigned leave presentation: Writing a self-mentoring book manuscript for new college faculty. BSU, Muncie, IN, Nov. 14, 2012. (Local, Non-Competitive)

**Flowers, J.,** Person, T., Shepelak, D., & Coburn, K.\* (2007). Adobe Macromedia Breeze Meeting. Conference on Technology Enhanced Teaching in Distance Education. BSU, Muncie, IN, Feb. 16, 2007. (Local, Non-Competitive)

**Flowers, J.,** & Cotton, S. (2007). Optimizing the use of discussion boards. Conference on Technology Enhanced Teaching in Distance Education. BSU, Muncie, IN, Feb. 16, 2007. (Local, Non-Competitive)

**Flowers, J.** (2006). A learning objects frame of mind. Ball State University Libraries Faculty Showcase. Feb. 23, 2006, Muncie, IN. Poster Session. (Local) (Related items in 6.2a, 6.2b)

**Flowers, J.** (2005). Humor in your class. Technology Educators of Indiana Annual Conference, Indianapolis, IN. (Related items in 6.1a, 6.2a, 6.2b) (State, Non-Competitive)

Ryan, M., Ali, N., Hodson-Carlton, K.,

Ali, N., Ryan, M., Hodson-Carlton, K., **Flowers, J.**, Rose, M., & Wayda, V. (2004). *Connecting research with online teaching: A successful collaborative project*. Ball State University Teaching & Learning Conference 6. April 9, 2004, Muncie, IN. Poster Session. (Local) (Related item in 6.4)

### 6.3 Creative Activities

**Flowers, J.** (2013). "Custom Intersection Original Artwork: Budget Committee", Original Artwork, Custom artistic creations were commissioned by Randy Howard that showed "Ball State University" in one orientation and "State Budget Committee" in another. With an introduction by the BSU President, Dr. Flowers gave a presentation on how these were created at a dinner honoring representatives of the State Budget Committee, to whom the artwork was distributed., Completed and disseminated. (October 2013).

**Flowers, J.** (2013). "Custom Intersection Original Artwork: Owsley", Original artwork, An original artistic creation was developed and mass produced showing the intersection of "Ball State University" in one orientation and "David Owsley

Museum of Art" in another. This was commissioned by Dr. Randy Howard, VP for Business Affairs and BSU Treasurer., Completed and disseminated. (May 2013).

**Flowers, J.** (2005.) Jigsaw Cooperative Learning Groups in Blackboard (An online pedagogical video.) Office of Teaching and Learning Advancement, Ball State University. <http://www.bsu.edu/web/otla/teachtech/vidindex.htm> (Local, Invited)

**Flowers, J.** (2000.) ITEDU 510, Technology: Use and Assessment (A new, online course). (Related item in 5.5) (National, Non-Competitive)

**Flowers, J., & Musselman, L.\*** (1997). Women's Creative Connection, A World Wide Web site highlighting the art of Ball State University's women faculty, students and alumnae. (Related item in 6.4) (International, Non-Competitive)

Bao, H., **Flowers, J.**, Hines, C., & Verma, A. (1996). TechnOArt. Videotape. Old Dominion University, Norfolk, VA. (Related item in 6.4) (Local, Non-Competitive)

## 6.4 Grant Proposals

### 6.4a External

Title: GE Additive  
Agency: General Electric  
Proposal #:   
Amount: \$250,000  
Submitted: Spring, 2018 (preliminary proposal)  
Status: preliminary proposal approved; final proposal not approved  
(Rejection Rate > 99%)  
PI: **J. Flowers**  
Co PI: Jessica Calderwood, Art

Title: GE Additive  
Agency: General Electric  
Proposal #:   
Amount: \$200,000  
Submitted: February 23, 2017 (preliminary proposal submitted)  
May 1, 2017 (final proposal submitted)  
Status: Selected as finalist, but then not funded  
PI: **J. Flowers**  
Co-Author: Alex Wierzbicki

Title: Discovery 3D Printing Green Design Competition



Agency: Discovery Group  
Proposal #: P17-0314  
Amount: \$11,998  
Submitted: November, 2016  
Status: not funded  
PI: R. Xu  
Co-PI: **J. Flowers**

Title: Artful Green-Prototyping @ a Distance  
Agency: Charles E. Heller Charitable Foundation  
Proposal #: P666-16  
Amount: \$49,381  
Submitted: March 16, 2016  
Status: not funded  
PI: **J. Flowers**  
Co-PI: None (co-authored with Graduate Assistant, Alecia Gorski)  
Project Dates: December 1, 2016 through June 30, 2018  
Note: National and Competitive

Title: Quality-of-Life & Green-Prototyping @ a Distance  
Agency: Bayer USA Foundation  
Proposal #: 273-16  
Amount: \$158,471  
Submitted: October 15, 2015  
Status: not funded  
PI: **J. Flowers**  
Co-PI: None (co-authored with Graduate Assistant, Alecia Tamayo)  
Project Dates: July 1, 2016 through June 30, 2019  
Note: National and Competitive

Title: Discovery 3D Printing Design Competition  
Agency: Discovery Group  
Proposal #: 248-15  
Amount: \$17,613  
Submitted: November, 2014  
Status: not funded  
PI: R. Xu  
Co-PI: **J. Flowers**  
Note: National and Competitive (This was withdrawn in March 2015 after initial review and invitation to make a finalist's presentation when the PI learned that her sabbatical proposal had been approved and she would not be able to work on this during the entire funding period.)

Title: Green Prototyping and Upcycling.  
Agency: National Collegiate Inventors and Innovators Alliance  
Proposal #: 630-14  
Amount: \$42,826  
Submitted: May 8, 2014  
Status: Not Funded  
PI: **J. Flowers**  
Co-PI: R. Kanu  
Project Dates: August 1, 2014 – July 31, 2017  
Note: National and Competitive

Title: Green Prototyping and Upcycling.  
Agency: National Collegiate Inventors and Innovators Alliance  
Proposal #: 267-14  
Amount: \$50,000  
Submitted: November 8, 2013  
Status: Not Funded  
PI: **J. Flowers**  
Co-PI: R. Kanu  
Project Dates: July 1, 2014 – June 30, 2017  
Note: National and Competitive

Title: Local Histories Net.  
Agency: Alfred P. Sloan Foundation  
Proposal #: P374-13  
Amount: \$334,009 from Sloan with \$72,610 more from BSU  
Submitted: Jan. 10, 2013 (Letter of Inquiry)  
Status: Not Funded  
PI: **J. Flowers**  
Project Dates: July 1, 2013 – December 31, 2016  
Note: Letter of Inquiry, International and Competitive

Title: Spectrum: Enhancing STEM Teachers Understandings of Engineering Practices through Modeling.  
Agency: National Science Foundation, DUE-TUES  
Proposal #: 676-12  
Amount: \$199,980.00  
Submitted: May 2012  
Status: External, not funded  
PI: M. A. Rose  
Co-PI: **J. Flowers**, J. Bryan  
Date: Submitted November 16, 2011  
Note: Preliminary proposal, National and Competitive.

Title: From a Distance – Management and Assessment of Distance Nursing Students’ Clinical Experiences.  
Agency: Robert Wood Johnson Foundation  
Proposal #: 275-12  
Amount: \$289,000  
Status: External, not funded  
PI: C. Pearsall (St. Joseph’s College, NY)  
Co-PI: K. Hodson Carlton, **J. Flowers**  
Date: Submitted November 16, 2011  
Note: Preliminary proposal, National and Competitive.

Title: Cell phone impacts: Teaching about cell phones and the environment to keep our communities clean  
Agency: EPA Environmental Education  
Proposal #: 636-11  
Amount: \$45,319.00  
Status: not funded  
PI: Rose, Mary A., Flowers, James C.  
Date: Submitted May 2011  
Note: National and Competitive.

Title: EnviroTech II: Enhancing Environmental and Technological Literacy  
Agency: US Environmental Protection Agency  
Proposal #: 308-10  
Amount: \$40,095 from EPA plus \$44,488 internal = \$84,583  
Status: External, Not Funded  
PI: M. A. Rose  
Co-PI: **J. Flowers**  
Date: Submitted December, 2009 for funding consideration in 2010  
Note: National, Competitive

Title: Mathematics in Technology Education: Judgments of Grade-Level Appropriateness  
Agency: Council on Technology Teacher Education Research Incentive Grant Program  
Proposal #: 188-11  
Amount: \$1000  
Status: External, Funded  
PI: **J. Flowers**  
Co-PI: M. A. Rose  
Date: Submitted November, 2009 for funding consideration in 2010  
Note: National, Competitive

Title: From a Distance – Identification of Best Practices Utilized in the Management and Assessment of Distance Nursing Students’ Clinical Experiences.  
Agency: St. Joseph’s College, NY  
Proposal #: 477-09  
Amount: \$4,000  
Status: External, rejected by NLN  
PI: K. Hodson Carlton  
Co-PI: **J. Flowers**  
Other: C. Pearsall (NLN grant proposal PI)  
Date: Submitted March, 2009  
Note: This is actually a submission to the National League of Nursing from all three PIs, with Dr. Catherine Pearsall from St. Joseph’s College as the PI; since this proposal is sent from St. Joseph’s, Ball State is listed as submitting a proposal to St. Joseph’s. The NLN proposal is National and Competitive. The amount requested from NLN was \$6,600.

Title: A Proposal for an FDM Rapid Prototyping Machine  
Agency: Ball State University, Lilly V  
Amount: \$45,235  
Status: External, not funded  
PI: R. Kanu  
Co-PI: J. Flowers, R. Xu  
Date: Submitted April 2008  
Note: Local, Competitive

Title: Immersive Experiences in Computational Mathematics at Ball State University  
Agency: National Science Foundation: CSUMS  
Proposal #: 119-08  
Amount: \$1,234,945 plus \$97,500 from BSU  
Status: External, not funded  
PI: M. Karls  
Co-PI: M. Begum, K. Jones, I. Livshits, R. Stankewitz  
Other: Faculty Advisors: C. Dean, **J. Flowers**, M. Khatun, T. Liu  
Submitted: October 2007  
Dates: July 1, 2008 to June 30, 2013  
Note: National, Competitive

Title: Need, Demand, and Models for an Online Doctoral Program in Technology Education

Agency: Council on Technology Teacher Education Research Incentive Grant Program  
Proposal #: 136-06  
Amount: \$968  
Status: External, Funded  
PI: **J. Flowers**  
Co-PI: (Co-author: Holly Baltzer\*)  
Date: Submitted November, 2005 for funding consideration in 2006  
Note: National, Competitive

Title: Creating Instruction with Online Reusable Learning Objects  
Agency: Indiana Higher Education Telecommunication System.  
Amount: \$22,321  
Status: External, Funded.  
PI: **J. Flowers**  
Date: 2001-2003  
Note: State, Competitive

Title: Design and Rapid Prototyping Instrumentation for Technology Teacher Education  
Agency: National Science Foundation  
Amount: \$60,730  
Status: External, Funded  
PI: **J. Flowers**  
Date: 1998-2000  
Note: National, Competitive

Title: SMART: Science, Math, And Related Technologies Workshop Project  
Agency: National Science Foundation  
Amount: \$479,793  
Status: External, Not funded  
PI: **J. Flowers** & C. McLaughlin were Equal PIs  
Date: 1997  
Note: National, Competitive

Title: MOTEVE8  
Agency: AT&T Foundation  
Amount: \$100,000  
Status: External, Not funded  
PI: **J. Flowers** & C. McLaughlin were Equal PIs  
Date: 1997  
Note: Related item in 6.4  
National, Competitive

Title: MOTEVE8  
Agency: Chrysler Corporation Fund  
Amount: \$500,000  
Status: External, Not funded  
PI: **J. Flowers** & C. McLaughlin were Equal PIs  
Date: 1997  
Note: Related item in 6.4  
National, Competitive

Title: MOTEVE8  
Agency: Ford Foundation  
Amount: \$3,234,000  
Status: External, Not funded  
PI: **J. Flowers** & C. McLaughlin were Equal PIs  
Date: 1997  
Note: Related item in 6.4  
National, Competitive

Title: MOTEVE8  
Agency: Intel Foundation  
Amount: \$75,000  
Status: External, Not funded  
PI: **J. Flowers** & C. McLaughlin were Equal PIs  
Date: 1997  
Note: Related item in 6.4  
National, Competitive

Title: MOTEVE8  
Agency: NEC Foundation of America  
Amount: \$50,000  
Status: External, Not funded  
PI: **J. Flowers** & C. McLaughlin were Equal PIs  
Date: 1997  
Note: Related item in 6.4  
National, Competitive

Title: MOTEVE8  
Agency: Target Stores  
Amount: \$80,000  
Status: External, Not funded  
PI: **J. Flowers** & C. McLaughlin were Equal PIs  
Date: 1997

Note: Related item in 6.4  
National, Competitive

Title: MOTEVE8  
Agency: Toyota USA Foundation  
Amount: \$190,000  
Status: External, Not funded  
PI: **J. Flowers** & C. McLaughlin were Equal PIs  
Date: 1997  
Note: Related item in 6.4  
National, Competitive

Title: The Master of Engineering Degree Program with emphasis in design and manufacturing  
Agency: National Science Foundation  
Amount: \$391,752  
Status: External, Not funded  
PI:  
Co-PI: **J. Flowers**  
Date: 1996  
Note: National, Competitive

Title: Pathways to teaching scholarship fund  
Agency: North Shore Foundation  
Amount: \$50,000  
Status: External, Funded  
PI: P. Heine, **J. Flowers**  
Date: 1995-1996  
Note: **J. Flowers** was Project Co-Director  
National, Competitive

Title: Interactive course on biomechanics modeling and simulation using fluid dynamics and mechanisms  
Agency: National Science Foundation  
Amount: \$370,000  
Status: External, Not funded  
PI: A. Demuren  
Co-PI: **J. Flowers**  
Date: 1995  
Note: National, Competitive

Title: Pathways to teaching  
Agency: DeWitt Wallace - Reader's Digest Fund

Amount: \$612,000  
Status: External, Funded  
PI: S. Greiner  
Date: 1994-96  
Note: **J. Flowers** was Project Co-Director  
National, Competitive

Title: Female technology teacher program (Pre-proposal)  
Agency: National Science Foundation  
Amount: Unspecified amount  
Status: External, Not funded  
PI: **J. Flowers**  
Co-PI: C. LaBudde  
Date: 1994  
Note: National, Competitive

Title: 1994-1995 evaluation of the "High Schools That Work Program  
Agency: Virginia Department of Education  
Amount: \$19,700  
Status: External, Not funded  
PI: **J. Flowers**  
Date: 1994  
Note: State, Competitive

Title: Urban minority teacher program (Letter of Inquiry)  
Agency: The Pew Charitable Trusts  
Amount: \$420,500  
Status: External, Not funded  
PI: **J. Flowers**  
Date: 1994  
Note: National, Competitive

Title: Gender equity in technology education:  
Attitudes of female technology education teachers in Virginia  
Agency: Virginia Department of Education  
Amount: \$1,836  
Status: External, Funded  
PI: **J. Flowers**  
Date: 1994  
Note: State, Competitive

Title: Promotion of environmental literacy in the state-supported colleges  
and universities of Virginia



Agency: State Council on Higher Education in Virginia,  
Virginia Environmental Endowment,  
Virginia Wildlife Federation, and  
Virginia Foundation for the Humanities

Amount: \$114,992  
Status: External, Not funded  
PI: J. Daniel  
Co-PI: **J. Flowers**  
Date: 1994  
Note: National, Competitive

Title: West Virginia yellow-poplar defect database  
Agency: United States Department of Agriculture, Forest Service  
Amount: \$27,000  
Status: External, Funded  
PI: C. Hassler  
Date: 1989  
Note: **J. Flowers** was co-author.  
National, Competitive

#### 6.4b Internal

Title: Advanced Additive Manufacturing  
Agency: BSU Digital Scholarship Lab Fellowship  
Amount: \$14,900  
Status: Not Funded  
PI: **J. Flowers**  
Date: Submitted February 13, 2017  
Note: Local (BSU)

Title: Master of Arts in Technology Education Graduate Enrollment  
Management Plan Recruiting, 2016-2019  
Agency: BSU Graduate School  
Amount: \$19,500 (\$18,000 Grad School + \$1,500 Dept)  
Status: Not Funded  
PI: **J. Flowers**  
Date: Submitted March 17, 2016  
Note: Local (BSU)

Title: Master of Arts in Career & Technical Education Graduate Enrollment  
Management Plan Recruiting, 2015-2018  
Agency: BSU Graduate School

Amount: \$28,665 (\$18,000 Grad School + \$9,750 Office of Distance Education + \$10,665 Dept)

Status: Funded

PI: **J. Flowers**

Date: June 1, 2015 to July 30, 2018

Note: Local (BSU)

Title: Master of Arts in Technology Education Graduate Enrollment Management Plan Recruiting, 2015-2018

Agency: BSU Graduate School

Amount: \$93,070 (\$74,570 Grad School + \$18,500 Dept)

Status: Not Funded

PI: **J. Flowers**

Date: Submitted March 20, 2015

Note: Local (BSU)

Title: 3D Printing Design Competition

Agency: BSU Provost's Immersive Learning Grant

Amount: \$38,739

Status: Not Funded

PI: R. Xu

Date: Submitted January 28, 2015

Note: Local (BSU)

Title: Green Prototyping & Upcycling

Agency: BSU Creative Teaching Grant Program

Amount: \$7,500

Status: Funded

PI: **J. Flowers**

Date: Submitted January 14, 2014

Note: Local (BSU)

Title: Master of Arts in Technology Education and Career & Technical Education Graduate Enrollment Management, AY 12/13-14/15

Agency: BSU Graduate School

Amount: \$72,740

Status: Funded

PI: **J. Flowers**

Date: Submitted October 12, 2012

Note: Local (BSU)

Title: Request for Funds from the BSU Graduate School for Graduate Student Recruiting into the MA in Technology Education Program

Agency: BSU Graduate School  
Amount: \$400  
Status: Internal, Funded  
PI: **J. Flowers**  
Date: Submitted October 21, 2010, Approved November 11, 2010  
Note: Local (BSU), Competitive

Title: Prototyping Intersections  
Agency: BSU Emerging Media Innovation Grant Program  
Amount: \$10,000  
Status: Internal, Pending  
PI: **J. Flowers**  
Date: Concept paper submitted February 8, 2010, for funding in 2010-2011  
Note: Local (BSU), Competitive

Title: Request for Funds from the BSU Graduate School for Graduate Student Recruiting into the MA in Career and Technical Education Program  
Agency: BSU Graduate School  
Amount: \$400  
Status: Internal, Funded  
PI: **J. Flowers**  
Date: Submitted in 2008 for funding in 2009  
Note: Local (BSU), Competitive

Title: Request for Funds from the BSU Graduate School for Graduate Student Recruiting  
Agency: BSU Graduate School  
Amount: \$400  
Status: Internal, Funded  
PI: **J. Flowers**  
Date: 2006 - 2007  
Note: Local (BSU), Competitive

Title: Faculty Researching OnLine Education (Faculty ROLE)  
Agency: George and Frances Ball Fund for Academic Excellence  
Amount: \$11,100  
Status: Internal, Funded  
PI: **J. Flowers**  
Co-PI: Nagia Ali, Kay Hodson-Carlton, Mary Annette Rose, Marilyn Ryan, Valerie Wayda  
Date: 2003 - 2004  
Note: Local, Competitive

(Related item in 5.10)

Title: Distance Education Enrollment in Industry & Technology  
Agency: BSU Office of Academic Assessment and Institutional Research,  
Summer Assessment Grants Program  
Amount: \$1,200  
Status: Internal, Funded  
PI: **J. Flowers**  
Date: 2003  
Note: Local, Competitive

Title: Putting Industry and Technology's Masters Online  
Agency: Ball State University Teleplex and College of Continuing Education  
and Public Service  
Amount: \$73,500  
Status: Internal, Funded  
PI: (see the note below)  
Author: **J. Flowers**  
Date: 2001-2004  
Note: Related item in 6.8  
This was a departmental proposal seeking established levels of  
support.  
Local, Non-Competitive

Title: Online Pedagogy  
Agency: Creative Teaching Program,  
Office of Technology & Learning Advancement  
Amount: \$4,000  
Status: Internal, Not funded  
PI: **J. Flowers**  
Date: 2001 - 2002  
Note: Local, Competitive

Title: Support for Web-Integrated Instruction Workshop  
Agency: George and Frances Ball Fund for Academic Excellence, and  
The 21<sup>st</sup> Century Fund for Faculty Development  
Amount: \$6,350  
Status: Internal, Not funded  
PI: **J. Flowers**  
Date: 2000  
Note: Local, Non-Competitive

Title: Web-integrated Instruction Workshop

Agency: Technology Fellowship Program,  
College of Applied Sciences and Technology  
Amount: \$2,500  
Status: Internal, Funded  
PI: **J. Flowers**  
Date: 2000 - 2001  
Note: Related items in 5.10, 7.1a  
Local, Non-Competitive

Title: Survey of Perceived Needs of ITEA Members for Online Technology Education.

Agency: Technology Fellowship Program,  
College of Applied Sciences and Technology  
Amount: \$2,500  
Status: Internal, Funded  
PI: **J. Flowers**  
Date: 1999 - 2000  
Note: Related item in 7.1a, 7.3  
Local, Non-competitive

Title: A Technological Forecaster in JavaScript

Agency: Information Technology, Instructional Development Grant,  
Ball State University  
Amount: \$1500  
Status: Internal, Not funded  
PI: **J. Flowers**  
Date: 1999  
Note: Local, Competitive

Title: ITEDU 206: Using and Assessing Technology - a new course

Agency: The Excellence in Leadership Teaching Award,  
Offices of the Provost and Vice President for Student Affairs,  
Ball State University  
Amount: \$2,500  
Status: Internal, Not funded  
PI: **J. Flowers**  
Date: 1998  
Note: Local, Competitive

Title: MOTEVE8

Agency: Provost's Initiative Program, Ball State University

Amount: \$5,250  
Status: Internal, Funded  
PI: **J. Flowers** & C. McLaughlin were Equal PIs  
Date: 1997  
Note: Related item in 6.4  
Local, Competitive

Title: The Women and Gender Studies Program Resource Center: Research Capabilities for the Twenty-First Century  
Agency: George and Frances Ball Foundation Fund for Academic Excellence and the 21<sup>st</sup> Century Fund for Faculty Development

Amount: \$5,000  
Status: Internal, Funded  
PI: K. Jones-Owen  
Date: 1997  
Note: **J. Flowers** was co-author with other members of the BSU Women and Gender Studies Grants and Funding Committee  
Local, Competitive

Ball Title: Women's creative connection: A World Wide Web site to highlight

State women in the fine and performing arts  
Agency: Ball State University Women and Gender Studies Program  
Amount: \$2,500  
Status: Internal, Funded  
PI: **J. Flowers**  
Co-PI: L. Musselman\*  
Date: 1996  
Note: Related item in 6.3  
Local, Competitive

Title: Preparation of a book proposal on 'Scrap paper projects to teach technology, math and science'  
Agency: College of Applied Science and Technology, Ball State University  
Amount: \$1,455  
Status: Internal, Not funded  
PI: **J. Flowers**  
Date: 1996  
Note: Local, Competitive

Title: TechnOArt  
Agency: Old Dominion University, Office of the Provost  
Amount: \$12,960

Status: Internal, Funded  
PI: **J. Flowers** was one of our equal investigators  
Date: 1994-6  
Note: Related item in 6.3  
Local, Competitive

Title: Statistical analysis of female enrollments in technology education in Virginia  
Agency: Old Dominion University  
Amount: \$3,385  
Status: Internal, Not funded  
PI: **J. Flowers**  
Date: 1993  
Note: Local, Competitive

## 6.5 Contracted Professional Work / Consulting Outside the University

Academic, Steven Dalcher, Ed.D. Engineering Project Support, Upland, IN. (February 7, 2018).

Academic, Scott Wolfe, Design Engineer, Food, Agricultural and Biological Engineering, Ohio State University, Muncie, IN. (December 6, 2017).

Non-Governmental Organization (NGO), OrthoWorx Indiana, Winona Lake, IN. (July 1, 2016 - June 30, 2017).

Academic, Judy Wand, BSU College of Architecture and Planning, Muncie, IN. (April 18, 2017).

Academic, Colton Meyers, Conifer HS, Jeffco Public Schools, Golden, Colorado. (February 7, 2017).

Academic, Steve Schuler, Burriss School, Muncie, IN. (January 18, 2017).

Consultant for Benjamin Vanlaningham, Research Engineer, Bone Cement Technologies, Biomet, Inc. Consulted regarding laser machining of an Eastman Tritan copolyester. (January 6, 2015)

Consultant as a member of Advanced Manufacturing Council for OrthoWorx Indiana, Winona Lake, IN. (May 2014 - June 30, 2015).

Consultant for Kevin Shulte, Burton Precision, Grand Rapids, MI. (December 29, 2014 - December 30, 2014).

Consultant for Ken Johnson, BSU Printing Services, Ball State University. (September 24, 2014).

Consultant for Melinda R. Barnadas, visual arts, UC San Diego. (March 31, 2014).

Consultant for Teresa Holfeld, University of Technology, Hamburg, Ball State University. (January 8, 2014 - January 26, 2014).

Consultant for Indiana University School of Informatics and Computing. Consulted with Bryce Himebaugh, Service Engineer, on their possible installation of rapid prototyping technologies. 2013.

Consultant for Logan Day on laser machining power measurement and commercial ventures. 2013.

Consultant for Sterling Sales and Engineering, Inc. (Mr. Scott Gross). 2013.

Consultant for GOSU Tech. As Director of Online Education, I consulted regarding the future administration of online educational programs at another university in Indiana. (Mr. Gerald Pall). 2013.

Consultant for Jarden Home Brands (Mr. Scott Hager, Product Development Engineer), 2009.

Under contract with Allyn & Bacon, Dr. Flowers reviewed the following book to provide information to inform revision in the creation of a fifth edition, September, 2008. (Item also appears in 6.6):

Marsh, C. J., & Willis, G. (2007). *Curriculum: Alternative approaches, ongoing issues* (4th ed.). Upper Saddle River, NJ: Merrill Prentice Hall. [ISBN 0-13-171510-0]

Multimedia University, Malaysia, 2006 – 2007, contracted work as an External Examiner for MSc in Creative Multimedia (by research). (Related item in 5.2)

## 6.6 Reviewer/Referee for Professional Journals, Books, etc.

Chapter Reviewer. (Review of a book chapter manuscript for) *Interdisciplinary and International Perspectives on 3D Printing in Education*. IGI Global. (2018).

Reviewer. *Journal of Technology Education*. (2016-Present)



Reviewer. *International Journal of Doctoral Studies*. (2007-Present)

Reviewer. *American Journal of Distance Education*. (2007-Present)

Reviewer. *Journal of STEM Teacher Education*. (2010-Present)

Member. (2012-2013). International Program Committee. IASTED International Conference on Web-based Education (WBE 2013). The International Association of Science and Technology for Development. Innsbruck, Austria, February 13 - 15, 2013. (Related item in 7.2d)

Member. (2011). International Program Committee. IASTED International Conference on Technology for Education (TE 2011). The International Association of Science and Technology for Development. Dallas, TX, December 14 - 16, 2011. (Related item in 7.2d)

Member. (2011). International Program Committee. The Ninth IASTED International Conference on Technology for Education and Learning (TEL 2011). The International Association of Science and Technology for Development. Beijing, China, October 24 - 26, 2011. (Related item in 7.2d)

Reviewer (as Assistant Editor: 2000-2009, as Reviewer: 2000 - present). *J. of Industrial Teacher Education*, renamed the *Journal of STEM Teacher Education*. (Related item in 7.2d) (International)

Reviewer as member of the International Program Committee for the Ninth International Association of Science and Technology for Development International Conference on Web-Based Education, Sharm El Sheikh, Egypt, March 15-17, 2010. (2009-2010) (Related item in 7.2d) (International)

Grant Reviewer for the 2009 round of BSU Emerging Media Research Grant Proposals. (Also listed in 7.1c)

Reviewer. *International Journal of Human Resources Development and Management*. (2009)

Reviewer as member of the International Program Committee for the Eight International Association of Science and Technology for Development International Conference on Web-Based Education, Phuket, Thailand, March 16-18, 2009. (2008-2009) (Related item in 7.2d) (International)

Reviewer as a member of the *TIES* Editorial Advisory Committee. (1996-2006). (Related item in 7.2d) (International)

Under contract with Allyn & Bacon, Dr. Flowers reviewed the following book to provide information to inform revision in the creation of a fifth edition, September, 2008. (Item also appears in 6.5): Marsh, C. J., & Willis, G. (2007). *Curriculum: Alternative approaches, ongoing issues* (4th ed.). Upper Saddle River, NJ: Merrill Prentice Hall. [ISBN 0-13-171510-0]

Reviewer as member of the International Program Committee for the Seventh International Association of Science and Technology for Development International Conference on Web-Based Education, Innsbruck, Austria, March, 2008. (2007-2008) (Related item in 7.2d) (International)

Reviewer as member of the International Program Committee for the Sixth International Association of Science and Technology for Development International Conference on Web-Based Education, Chamonix, France. (2006-2007) (Related item in 7.2d) (International)

Reviewer as member of the International Program Committee for the Fifth International Association of Science and Technology for Development International Conference on Web-Based Education, Puerto Vallarta, Mexico. (2005-2006) (Related item in 7.2d) (International)

Reviewer for Research Award of the Technology Education Division of the National Association of Industrial and Technical Teacher Education.

Reviewer. (1996-2005). *J. of Women and Minorities in Science and Engineering*. (International)

Beta 2 Reviewer. (2003). Microsoft Office 2003. (International)

Reviewer. (2002-2003). Indiana Higher Education Telecommunications Systems and Indiana partnership for Statewide Education Module and Course Development Grant Program. (State)

Reviewer. (2002). *The Technology Interface*. (International)

Member. (2000-2001). ITEA Curriculum Brief Series Editorial Board. (International)

Reviewer. (1998-2003). *DIRASAT*. (a refereed research journal published by the University of Jordan at Amman, Jordan.) (International)

Reviewer. (1995-1998). NCATE portfolios. (National)

Reviewer. (1993-1997). International Technology Education Association publications (as a member of the publications committee). (International)

Reviewer and Editor. (1993-1996). Monograph Series, Virginia Council on Technology Teacher Education, as a member of the VCTTE publications committee. (Five monographs were revised, and can now be found at the following Internet site:

<http://teched.vt.edu/vctte/>) (State)

Reviewer. (1995). Thompson Learning Tools. (International)

Grant Reviewer. (1993). Virginia Department of Education, "High Schools that Work" competitive grants program. (State)

Beta Test Reviewer. (1993). AGARIS software developed by the USDA Forest Service. (International)

## 6.7 Professional Growth

6.7a Post-Doctoral Work / Visiting Scholar NONE

6.7b Attendance at Professional Meetings

International Technology and Engineering Education Association Annual Conference. (Apr. 2018). Atlanta, GA. (International)

Oswego Fall Conference, Technology Education, SUNY College at Oswego. Oswego, NY. (October, 2017.)

International Technology and Engineering Education Association Annual Conference. (Mar. 2017). Dallas, TX. (International)

International Technology and Engineering Education Association Annual Conference. (Mar. 2016). National Harbor, MD. (International)

International Technology and Engineering Education Association Annual Conference. (Mar. 2015). Milwaukee, WI. (International)

75th Oswego Fall Conference, Technology Education, SUNY College at Oswego. Oswego, NY. (October, 2014.)

33<sup>rd</sup> National Research-to-Practice (R2P) Conference in Adult and Higher Education with Ball State University's 2<sup>nd</sup> Annual Adult, Higher, and Community Education Research Conference. (Sept. 19, 2014). Muncie, IN. (National)

30<sup>th</sup> Annual Conference on Distance Teaching and Learning. (Aug., 2014). Madison, WI. (International)

89<sup>th</sup> Annual Conference of the International Graphic Arts Education Association. (July, 2014). Mansfield, OH.

International Technology and Engineering Education Association Annual Conference. (Mar. 2014). Orlando, FL. (International)

World Usability Day 2013, Indiana User Experience Professional Association. November 14, 2013. Indianapolis, IN. (State)

Virginia Technology and Engineering Education Association Annual Conference. (July, 2013). Hampton Roads, VA. (State)

International Technology and Engineering Education Association Annual Conference. (Mar. 2013). Columbus, OH. (International)

International Technology and Engineering Education Association Annual Conference. (Mar. 2012). Long Beach, CA. (International)

Sloan Consortium Conference on Online Teaching. (November, 2011). Lake Buena Vista, FL. (National)

Lilly Conference on College Teaching & Learning. (Sept., 2011). Traverse City, MI. (National)

International Technology and Engineering Education Association Annual Conference. (Mar. 2011). Minneapolis, MN. (International)

Fall Conference. Department of Technology. SUNY College at Oswego. Oswego, NY. October 28-29, 2010) (State)

International Technology and Engineering Education Association Annual Conference. (Mar. 2010). Charlotte, NC. (International)

Technology Educators of Indiana Annual Conference (Nov., 2009). Indianapolis, IN. (State)

25<sup>nd</sup> Annual Conference on Distance Teaching and Learning. (Aug., 2009). Madison, WI. (International)

International Technology Education Association Annual Conference. (Mar. 2009). Louisville, KY. (International)

American Society for Engineering Education Annual Conference. (Jun. 2008). Pittsburgh, PA. (International)

International Technology Education Association Annual Conference. (Feb. 2008). Salt Lake City, UT. (International)

Association for Career and Technical Education Annual Convention. (Dec. 12 - 15, 2007). Las Vegas, NV. (National)

23<sup>rd</sup> Annual Conference on Distance Teaching and Learning. (Aug., 2007). Madison, WI. (International)

International Technology Education Association Annual Conference. (Mar. 2007). San Antonio, TX. (International)

Conference on Technology Enhanced Teaching in Distance Education. (Feb. 16, 2007). BSU, Muncie, IN. (Local)

22<sup>nd</sup> Annual Conference on Distance Teaching and Learning. (Aug., 2006). Madison, WI. (International)

ATAIN Conference: Digital Fabrication: Focus on Indiana. (Mar. 27, 2006). Muncie, IN. (State)

International Technology Education Association Annual Conference. (Mar. 2006). Baltimore, MD. (International)

Technology Educators of Indiana Annual Conference. October, 2005. Indianapolis, IN. (State)

21<sup>st</sup> Annual Conference on Distance Teaching and Learning. (Aug., 2005). Madison, WI. (International)

International Technology Education Association Annual Conference. (Mar., 2005).

Kansas City, MO. (International)

Indiana Chapter, Usability Professionals Association. (October 11, 2004).  
Indianapolis, IN. (State)

Ball State University Teaching & Learning Conference 6. (April 9, 2004). Muncie, IN.  
(Local)

International Technology Education Association Annual Conference. (Mar. 18 – 20,  
2004). Albuquerque, NM. (International)

Association for Career and Technical Education Annual Convention. (Dec. 11 - 14,  
2003). Orlando, FL. (National)

Annual Conference of the Indiana Distance Learning Association. (Oct. 29, 2003).  
Carmel, IN. (State)

Greening of the Campus V: Connecting to Place. (Sept. 18 - 20, 2003). Muncie, IN.  
(International)

19<sup>th</sup> Annual Conference on Distance Teaching and Learning. (Aug., 2003). Madison,  
WI. (International)

International Technology Education Association Annual Conference. (Mar. 14 – 16,  
2003). Nashville, TN. (International)

Midwest Educational Technology Conference, (Jan. 28, 2003), St. Louis, MO.  
(Regional)

Ivy Tech's Technology Day, (Oct. 25, 2002). Bloomington, IN. (State)

18<sup>th</sup> Annual Conference on Distance Teaching and Learning. (Aug. 14 – 16, 2002).  
Madison, WI. (International)

International Technology Education Association Annual Conference. (Mar. 13 – 16,  
2002). Columbus, OH. (International)

Indiana Higher Education Telecommunication System All Partners Conference:  
Sharing the Learning Space. (April 3, 2002). Bloomington, IN. (State)

Association for Career and Technical Education Annual Convention, (Dec. 13 - 16,  
2001). New Orleans, LA. (National)

Council for Leadership Forum, Technology Education Association of Pennsylvania, November 8, 2001, Camp Hill, PA. (State)

National Association of Industrial Technology Annual Convention. (Nov. 1 - 2, 2001). Dearborn, MI. (National)

Greening of the Campus 4. (Sept. 20 - 23, 2001). Muncie, IN. (International)

International Technology Education Association Annual Conference. (Mar. 21 - 23, 2001). Atlanta, GA. (International)

National Association of Industrial Technology Annual Convention. (Nov. 1 - 4, 2000). Pittsburgh, PA. (National)

Laser Machining in Technology Education. 19<sup>th</sup> International Congress on Applications of Lasers & Electro-Optics. (Oct. 2 - 5, 2000). Dearborn, MI. (International)

16<sup>th</sup> Annual Conference on Distance Teaching and Learning. (Aug. 2 - 4, 2000). Madison, WI. (International)

International Technology Education Association Annual Conference. (Apr. 6 - 8, 2000). Salt Lake City, UT. (International)

Lilly Conference West on College Teaching and Learning. (Mar. 3 - 5, 2000). Lake Arrowhead, CA. (Regional)

Indiana Blackboard Day. (Feb. 25, 2000). University of Indianapolis. (State)

Technology, Pedagogy, Community: Distributed Learning for the New Millennium. Oct. 25, 1999. Indiana Higher Education Telecommunication System. Ball State University, Muncie, IN. (State)

National Association of Industrial Technology Annual Convention. (Oct. 22 - 23, 1998). Indianapolis, IN. (National)

Women in Engineering Program and Advocates Network Annual Conference. (June 16, 1998). Seattle, WA. (International)

Women's Studies Symposium. (Mar. 20, 1998). Purdue University. West Lafayette, IN. (International)

- WI. Women's Studies Conference. (Mar. 27, 1998). Marquette University. Milwaukee, (International)
- International Technology Education Association Annual Conference. (1998). Fort Worth, TX. (International)
- Technology Educators of Indiana Annual Conference, Brown County, IN. (1997) (State)
- International Technology Education Association Annual Conference. (1997). Tampa, FL. (International)
- Preparing Our Future Teachers for the 21<sup>st</sup> Century. (Feb. 13, 1997). Association of University Teacher Educators for Workforce Development and the Indiana Commission on Vocational and Technical Education. Indianapolis, IN. (State)
- Mid-America Plastics Conference. (Oct 29, 1997) Indianapolis, IN. (Regional)
- Technology Education Collegiate Association Midwest Regional Conference. (1996). Indianapolis, IN. (Regional)
- International Technology Education Association Annual Conference. (1996). Phoenix, AZ. (International)
- Virginia Council on Technology Teacher Education. (1996). Virginia Beach, VA. (State)
- Technology Education Collegiate Association Eastern Regional Conference. (1996). Virginia Beach, VA. (Regional)
- "Technosphere 96," Virginia Technology Student Association State Conference. (1996). Hampton, VA. (State)
- "Redeeming the American Promise," 13th Annual Conference of the Southern Education Foundation. (1995). Atlanta, GA. (International)
- International Technology Education Association Annual Conference. (1995). Nashville, TN. (International)
- Virginia Council on Technology Teacher Education. (1995). Virginia Beach, VA. (State)



Technology Education Collegiate Association Eastern Regional Conference. (1995).  
Virginia Beach, VA. (Regional)

Women in Engineering National Conference. (1995). Washington, DC.  
(International)

"Technosphere 95," Virginia Technology Student Association State Conference.  
(1995). Richmond, VA. (State)

International Technology Education Association Annual Conference. (1994). Kansas  
City, MO. (International)

Southeast Technology Education Conference. (1994). Boone, NC. (Regional)

Virginia Council on Technology Teacher Education. (1994). Virginia Beach, VA.  
(State)

Women in Engineering National Conference. (1994). Washington, DC.  
(International)

Technology Education Collegiate Association Eastern Regional Conference. (1994).  
Virginia Beach, VA. (Regional)

"Technosphere 94," Virginia Technology Student Association State Conference.  
(1994). Richmond, VA. (State)

International Technology Education Association Annual Conference. (1993).  
Charlotte, NC. (International)

"Technosphere 93," Virginia Technology Student Association State Conference.  
(1993). Richmond, VA. (State)

Make the Connections Workshop, NASA. (1993). Hampton, VA. (National)

Virginia Council on Technology Teacher Education. (1992). Blacksburg, VA. (State)

Tidewater Technology Council. (1992). Chesapeake, VA. (Local)

International Technology Education Association Annual Conference. (1990).  
Indianapolis, IN. (International)

Forest Product Research Society Annual Conference. (1990). Salt Lake City, UT.  
(International)

American Industrial Arts Association Annual Conference. (1982). Hartford, CN.  
(National)

**6.7c Non-Degree Study, Continuing Education (\* indicates Item is also in 5.9.)**

National Science Foundation Workshop. March 19, 2015. CAST & SPA, BSU.

ZPrinter Best Practices. November 27, 2012, 3D Systems.

Introduction to ScanStudio HD – Basic Scanner Operation to Create a 3D Mesh Model. November 8, 2012, NextEngine.

Graduate Research on the Integration of Multimedia in Course Design. BSU Emerging Media. November 16, 2012.

Creating a Digital Textbook: From Process to Product. BSU. November 28, 2011.

BSU Blackboard Users Group. September 7, 2011; October 5, 2011; November 2, 2011.\*

Case in Point: Safe Assign. BSU. November 16, 2011. (Local). \*

Using Authentic Assignments to Assess Learning in Online Courses. BSU. November 15, 2011. (Local). \*

Banner System Training. BSU. November 1, 2011.

Workshop, Process Improvements - How to Streamline Work Processes. BSU. Oct. 25, 2011. \*

So you Want to Publish a Book, presented by David E. Sumner, Department of Journalism, & Daniel Lee. October 11, 2011.

Workshop, Blackboard: Blogs, Discussion Boards, Journals, and Wikis. BSU. Sept 26, 2011. \*

Workshop, How to Use Social Media to Build Your Professional Network. BSU. September 20, 2011. \*

Workshop, Identifying Needs, Setting & Managing Multiple Priorities. BSU. September 8, 2011. \*

Workshop, Good Stress / Bad Stress - Dealing with Unhealthy Stress. BSU. September 8, 2011.

Emerging Media Faculty Symposium. Ball State University. April 25, 2011. \*

The state of diversified mentoring relationships at Ball State University, presented by Dr. Marcy Meyer, Department of Communication Studies, BSU. April 22, 2011. \*

Expanding the reach of your classroom: Experiencing videoconferencing as a teaching tool, presented by Dr. Ann Leitze, Department of Mathematical Sciences, BSU. March 31, 2011. \*

Workshop, Web Communications & Brand Training. (November 2010)

Google Docs / Presentations for Educators. Information Technology Training. October 19, 2010. (Local).

Developing a P&T Portfolio. Teaching and Learning Advancement. October 19, 2010. (Local).

Advancing Student Engagement with 3D Printing: Bringing Student Designs to Life in the 21st Century Classroom. Stratasys Webinar. September 22, 2010. (National)

SiteCore Basics. Information Technology Training. September 17, 2010. (Local).

Stratasys Webinar: Tape Wrangler. Stratasys. April 29, 2010. (National)

Online Grade Submission. Information Technology Training. April 15, 2010. (Local).

T&L Workshop – Questioning Techniques to Activate & Assess Student Learning. Teaching and Learning Advancement. February 16, 2010. (Local).

Blackboard: Q & A. University Libraries. September 30, 2009. (Local).

Blackboard 9 Preview. University Libraries. April 30, 2009. (Local).

Endnote X2. Workshop. University Libraries. March 4, 2009. (Local).

Microsoft OneNote 2007 Workshop. University Libraries. February 19, 2009. (Local).

Promoting Critical Thinking through Online Discussion Activities Workshop. Office of Teaching and Learning Advancement. Academic Research & Sponsored Programs. February 17, 2009. (Local).

Improving Objective Tests. Office of Teaching and Learning Advancement, BSU. October 15, 2008. (Local).

UCC-21 Proposal Writing Workshop – Tier 2. Office of Teaching and Learning Advancement, BSU. September 24, 2008. (Local).

Grant Searching Workshop for Faculty. BSU University Libraries. January 30, 2008. (Local)

Designing Hybrid Courses. Office of Teaching and Learning Advancement, BSU. November 14, 2007. (Local).

Enhancing Communication with Students via Technology. Office of Teaching and Learning Advancement, BSU. April 5, 2007. (Local).

Content Management for Web Page Development, Introduction to Vignette, Part II. University Libraries, BSU. November 16, 2006. (Local).

Content Management for Web Page Development, Introduction to Vignette, Part I. University Libraries, BSU. November 14, 2006. (Local).

MediaSite. Office of Teaching and Learning Advancement, BSU. November 8, 2006. (Local).

Adobe Acrobat: Forms. University Libraries, BSU. March 30, 2006. (Local).

Interactive Training for Faculty Test Group. Indiana Higher Education Telecommunications System. Mar. 9, 2006. (Local).

Graduate Advisor Web Page. Graduate School, BSU. Feb. 22, 2006. (Local).

Translating Difficult Concepts through Online Visuals. Indiana Higher Education Telecommunications System. Feb. 8, 2006. (State)

Learning Impacts of Instructional Technology. Office of Teaching and Learning Advancement, BSU. Feb. 3, 2006. (Local)

MediaSite. Office of Teaching and Learning Advancement, BSU. Jan 31, 2006. (Local)

Ladies and Gentlemen, Start Your Engines! Giving Faculty a Jump start into Online Course Development. Indiana Higher Education Telecommunications System. Jan. 11, 2006. (State)

Beyond Cheating. Indiana Higher Education Telecommunications System. Nov. 9, 2005. (State)

Increasing Attendance Without Taking Role. Office of Teaching and Learning Advancement, BSU. Oct. 7, 2005. (Local)

Macromedia Breeze in Indiana. Indiana Higher Education Telecommunications System. Sept. 14, 2005. (State)

Student Evaluation of Online Teaching, Teleconference. Oct. 13, 2004. (State)

Video Conferencing Workshop. BSU. Sep. 13, 2004. (Local)

University Libraries Faculty Technology Showcase. BSU. Mar. 24, 2004. (Local)

Industrial Design Practice, Conceptualization, and Innovation. International Technology Education Association Annual Conference, Albuquerque, NM. Mar. 20, 2004, (International)

FrontPage Interactivity Training. BSU. Feb. 4, 2004. (Local)

Vignette Content Suite Workshop. BSU. Oct. 9 – 10, 2003. (Local)

Discussion Activities in Blackboard Workshop. BSU. Sept. 29 – Oct. 1, 2003. (Local)

Essential Digital Camcorder Workshop. BSU. Sept. 23 - 25, 2003. (Local)

Integrating Multimedia in Blackboard Workshop. BSU. Sept. 23 - 25, 2003. (Local)

Communication Tools in Blackboard Workshop. BSU. Sept. 11, 2003. (Local)

InQsit New Features Workshop. BSU. Aug. 28, 2003. (Local)

3D Modeling Workshop for Design, Drafting, and Graphics Educators. July 23 – 24, 2001, Indiana University – Purdue University, Indianapolis. (State)

FrontPage 2000 Advanced. April 4, 2001. BSU. (Local)

WebCat Workshop. Sep. 22, 2000. BSU. (Local)

Microsoft FrontPage Workshop. Sep. 13, 2000. BSU. (Local)

Advanced PowerPoint Workshop. May 10 - 11, 2000. BSU. (Local)

Blackboard's CourseInfo Question and Answer Workshop. Jan 14, 2000. BSU. (Local)

JavaScript for Educators. Nov. - Dec., 1999. University of California, Los Angeles, Extension Service. (4 credit hour course). (International)

Blackboard's CourseInfo Workshop. Nov. 5, 1999. BSU. (Local)

Introduction to InQsit. Oct. 29, 1999. BSU. (Local)

Exemplary Models for Web-Based Learning. Oct. 7, 1999. Florida Community College at Jacksonville, Center for the Advancement of Teaching and Learning, Muncie, IN. (International)

Web Gradebook Training. Sept. 8, 1999. BSU. (Local)

Cyberware Model 15 Laser Digitizer Training. July 16, 1999. Cyberware, Inc., Monterey, CA. (International)

Online Teaching and Learning Tools. May - June, 1999. University of California, Los Angeles, Extension Service. (4 credit hour course). (International)

Introduction to Plastics Materials, Processing, and Testing. June 7 - 19, 1999. Midwest Center for Advanced Technology Education, Muncie, IN. (Regional)

Unigraphics Workshop. May 17 - 21, 1999. Department of Industry & Technology, BSU. (Local)

InQsit Seminar. Mar. 1, 1999. BSU. (Local)

## 6.8 **Other**

Flowers, J. (2014). 2013-2014 online education report. Muncie, IN: Department of Technology, Ball State University.

Flowers, J. (2013). 2012-2013 online education report. Muncie, IN: Department of Technology, Ball State University.

Flowers, J. (2011). 2010-2011 online education report. Muncie, IN: Department of Technology, Ball State University.

Sabbatical Proposal: A publishable manuscript for a self-mentoring book for new higher education faculty members. BSU. Submitted October 21, 2010. Approved for Spring 2012.

Flowers, J. (2010). 2009-2010 online education report. Muncie, IN: Department of Technology, Ball State University.

Flowers, J. (2009). 2008-2009 online education report. Muncie, IN: Department of Technology, Ball State University.

Flowers, J. (2008). 2007-2008 online education report. Muncie, IN: Department of Technology, Ball State University.

Flowers, J. (2007). 2006-2007 online education report. Muncie, IN: Department of Technology, Ball State University.

Flowers, J. (2006). 2005-2006 online education report. Muncie, IN: Department of Industry and Technology, Ball State University.

Flowers, J. (2005). 2004-2005 online education report. Muncie, IN: Department of Industry and Technology, Ball State University.

Flowers, J. (2004). 2003-2004 online education report. Muncie, IN: Department of Industry and Technology, Ball State University.

Flowers, J. (2003). Distance Education Enrollment in Industry and Technology – 2003 Summer Assessment Grant Report. Muncie, IN: Department of Industry and Technology, Ball State University.

Flowers, J. (2003). 2002-2003 online education report. Muncie, IN: Department of Industry and Technology, Ball State University.

Flowers, J. (2002). 2001-2002 online education report. Muncie, IN: Department of Industry and Technology, Ball State University.

Title: Distance Education Program Proposal: Master of Arts in Industrial Vocational / Technical Education  
Agency: Indiana Commission for Higher Education.  
Amount: \$0  
Status: External, Approved.  
PI:  
Co-PI:  
Author: **J. Flowers**  
Date: 2001  
Note: State, Non-Competitive (This was a proposal to place this degree program online.)  
Related items in 6.4 and 6.8.

Title: Distance Education Program Proposal: Master of Arts in Technology Education  
Agency: Indiana Commission for Higher Education.  
Amount: \$0  
Status: External, Approved  
PI:  
Co-PI:  
Author: **J. Flowers**  
Date: 2001  
Note: State, Non-Competitive (This was a proposal to place this degree program online.)  
Related items in 6.4 and 6.8.

Title: Proposal for Consideration by the Graduate Education Committee To Offer the Master of Arts in Technology Education and the Master of Arts In Industrial Vocational / Technical Education by Distance Education  
Agency: Graduate Education Committee, Ball State University.  
Amount: \$0  
Status: Internal, Approved  
PI:  
Co-PI:  
Author: **J. Flowers**  
Date: 2001  
Note: State, Non-Competitive (This was a proposal to place this degree program online.)  
Related items in 6.4 and 6.8.



Ball State University Distance Education Strategic Planning Committee. (2001). Ball State University's Distance Education Strategic Plan. Muncie, IN: Author. (Note: **Dr. Flowers** was one of the coauthoring committee members listed on page 25 of the document.) (Local, Non-Competitive)

**Dr. Flowers** was the Implementer / Instructor for doctoral research: "The Cognitive Dialog and Interaction Patterns of Graduate Students in an Online Conferencing Environment under Collaborative and Cooperative Structures." Mary Annette Rose\*, Doctoral Student, Principal Investigator, and Author. Indiana University. Fall, 2000. (Local, Non-Competitive)

Highlighted in the "Researcher's Notebook - A mini-chronicle of research-in-progress." Office of Academic Research and Sponsored Programs. (January, 1998). Research at Ball State, 32(1), 8. (Local, Non-Competitive)

## 7. Professional Service

### 7.1 Institutional Service

#### 7.1a Department

Graduate Advisor. (2018 – present). Master of Arts in Technology Education. Department of Educational Studies

Member. Graduate Education Committee. (2018 – present). Department of Educational Studies

Laboratory Administrator (2018 – present). Rapid Prototyping Laboratory. Department of Educational Studies

Member. Research Committee. (2018 – present). Department of Educational Studies

Member. (2018 – present). BS in Technology Education Program Committee. Department of Educational Studies

Member. (2018 – present). Promotion and Tenure Committee. Department of Educational Studies.

Member. (2018 – present). PhD Program Committee. Department of Educational Studies.

Member. (2017 – 2018). Promotion and Tenure Committee. Department of Family, Consumer, & Technology Education.

Graduate Advisor. (2017 – 2018). Master of Arts in Technology Education. Department of Family, Consumer, & Technology Education

Chair. Graduate Education Committee. (2017 – 2018). Department of Family, Consumer, & Technology Education

Member. Graduate Education Committee. (2017 – 2018). Department of Family, Consumer, & Technology Education

Laboratory Administrator (2017 – 2018). Rapid Prototyping Laboratory. Department of Family, Consumer, & Technology Education

Guest Lecturer. (November 15, 2018). Infrared Communications Technology. Presentation to Dr. Mary Annette Rose's TDPT 102 class.

Member. (2017 – Present). BS in Technology Education Program Committee. Department of Family, Consumer, & Technology Education

Member (1996 – 2017). Graduate Program Committee. Department of Technology

Member. (2004 – 2017). Computer Committee. Department of Technology

Graduate Advisor. (2004 – 2017). Master of Arts in Technology Education, Department of Technology

Laboratory Administrator (2006 – 2017). Rapid Prototyping Laboratory. Department of Technology

Guest Lecturer. (March 28, 2017). Usability Engineering. Presentation to Dr. Mary Annette Rose's Engineering Principles class.

Guest Lecturer. (March 27, 2017). Renewable Energy. Presentation to Dr. Mary Annette Rose's Honors 296 class.

Member. (1996 - 2017). BS in Technology Education Program Committee. Department of Technology

Member (1996 – 2017). Graduate Program Committee. Department of Technology

Member. (2004 – 2017). Computer Committee. Department of Technology

Guest Lecturer. (October 26, 2016). Isometrics. Presentation to Dr. Mary Annette Rose's TDPT 102 class.

Guest Lecturer. (November 11, 2016). Rapid Prototyping Technologies. Presentation to Dr. Mary Annette Rose's TDPT 102 class.

Director of Online Education. (2001 – 2015)

Chair (2012 – 2013). Department of Technology, Salary Committee.

Member (2012 – 2015). Department of Technology, Salary Committee.

Member (2013 – 2015). (Secretary: 2014-2014). Department of Technology, Promotion & Tenure Committee.

Guest Lecturer. (January 26, 2015). Theory of Multiview Drawing. Presentation to Dr. Mary Annette Rose's TDPT 102 class.

Guest Lecturer. (January 28, 2015). Missing Lines in Orthographic Multiview Drawings. Presentation to Dr. Mary Annette Rose's TDPT 102 class.

Guest Lecturer. (January 30, 2015). Ideation with Orthographics. Dimensioning. Two presentations to Dr. Mary Annette Rose's TDPT 102 class.

Presenter. (August 26, 2014). Rapid Prototyping Technologies. Presentation to Dr. Renmei Xu's TGRA 480 class. (Also listed under 7.5)

Co-Presenter with Dr. Edward Lazaros. (November 11, 2013). Online Master of Arts Degrees in Technology Education and Career and Technical Education from Ball State University. Live video presentation sponsored by the BSU Division of Online and Distance Education. (Also listed under 7.5)

Co-Presenter with Dr. Edward Lazaros. (May 14, 2013). Online Master of Arts Degrees in Technology Education and Career and Technical Education from Ball State University. Live video presentation sponsored by the BSU Division of Online and Distance Education. (Also listed under 7.5)

Presenter. (January 10, 2013). Rapid Prototyping Technologies. Presentation to Dr. Renmei Xu's ITGRA 480 class. (Also listed under 7.5)

Co-Presenter with Dr. Edward Lazaros. (March 19, 2013). Online Master of Arts Degrees in Technology Education and Career and Technical Education from Ball

State University. Live video presentation sponsored by the BSU Division of Online and Distance Education. (Also listed under 7.5)

Presenter. (November 13, 2012). Laser Scanning, Digitizing, and Reverse Engineering. Presentation to Dr. Mary Annette Rose's TDPT 102 class. (Also listed under 7.5)

Presenter. (March 19, 2012). The effect of board grade on yellow-poplar millwork cutting yield, and other research endeavors. Presentation to Dr. Mary Annette Rose's ITEDU 410 class. (Also listed under 7.5)

Member (2009-2010); (Secretary: 2007 – 2009). Department of Technology, Sustainability Committee.

Chair. (2010-2011); Member. (2009 – 2011) Department of Technology, Promotion and Tenure Committee.

Member. (2007 – 2010) Department of Technology Rapid Prototyping Lab Committee.

(Note: this committee does not meet.)

Co-Presenter with Dr. Samuel Cotton. (April 5, 2011). Online Master of Arts Degrees in Technology Education and Career and Technical Education from Ball State University. Live video presentation sponsored by the BSU School of Extended Education. (Also listed under 7.5)

Co-Presenter with Dr. Samuel Cotton. (January 25, 2011). Online Master of Arts Degrees in Technology Education and Career and Technical Education from Ball State University. Live video presentation sponsored by the BSU School of Extended Education. (Also listed under 7.5)

Worked with Dr. Michael Goldsby and others to make connections between the Entrepreneurship Program and Department of Technology courses in rapid prototyping and related areas. (2010-2011). (Also listed under 7.1c)

Presenter. (September 1, 2011). Rapid Prototyping Laboratory. Presentation to Dr. Renmei Xu's ITGRA 480 class. (Also listed under 7.5)

Faculty co-facilitator: Green Technology Day, Department of Technology, Ball State University, March 17, 2011.

Presenter. (September 21, 2010). Laser Machining, Laser Scanning & Rapid Prototyping. Presentations to two sections of Dr. Edward Lazaros' ITGRA 184 class. (Also listed under 7.5)

Co-Presenter with Dr. Samuel Cotton. (October 13, 2010). Online Master of Arts Degrees in Technology Education and Career and Technical Education from Ball State University. Live video presentation sponsored by the BSU School of Extended Education. (Also listed under 7.5)

Co-Presenter with Dr. Samuel Cotton. (June 1, 2010). Online Master of Arts Degrees in Technology Education and Career and Technical Education from Ball State University. Live video presentation sponsored by the BSU School of Extended Education. (Also listed under 7.5)

Presenter. (March 2, 2010). Rapid Prototyping. Presentation to Dr. Renmei Xu's ITGRA 480 class. (Also listed under 7.5)

Member. (2007 – 2009) Department of Technology Immersive Learning Committee. (Note: this committee does not meet.)

Faculty Mentor. (2007-2008)

Chair. (2008) Department of Technology Chair Election Committee.

Presenter. (Oct. 28, 2008). Rapid Prototyping. Presentation to Dr. Renmei Xu's ITGRA 480 class.

Presenter. (Sept. 13, 2007). Rapid Prototyping, and the Z510 Color Prototyper. Presentation to Dr. Renmei Xu's ITGRA 480 class.

Graduate Advisor. (2004 – 2005). Master of Arts in Career & Technical Education.

Undergraduate Advisor and Program Coordinator. (2000 to 2001). Department of Industry and Technology, Industrial Technology Program Committee.

Member. (2000 - 2001) Department of Industry and Technology, Departmental Web Site Committee.

Member. (1999-2001) Department of Industry and Technology, Promotion and Tenure Committee.

Laboratory Administrator (1996 to 2001). Materials Processing and Construction Laboratory, AT 144.

Co-Presenter (with Dr. Robert South). (Oct. 19, 2001). High Tech Workshop. BSU. (A technical workshop on Unigraphics and Rapid Prototyping for uncommitted BSU freshmen and sophomores.)

Member. (2000) Department of Industry and Technology, Technology Education Faculty Search Committee.

Faculty Advisor (i.e., Trustee). (1997-2000). Epsilon Pi Tau, Beta Chapter. (Related item in 7.4)

Presenter. (2000). Laser Machining and Rapid Prototyping. UniverCity 2000, BSU.

Guest Speaker. (Oct. 18, 2000). Teaching Online. ITEDU 691, BSU.

Author. (2000). Proposed Evaluation Instrument for Online Courses in Industry and Technology:

[http://www.bsu.edu/inqsit/inqsit.cgi/flowers2/surveys?course\\_evaluation](http://www.bsu.edu/inqsit/inqsit.cgi/flowers2/surveys?course_evaluation)

Author. (2000). Perceived Online Learning Needs in Technology Education (Preliminary Findings for Internal Use Only.) (Related item in 6.4, 7.3)

Co-Presenter (with Dr. Robert South). (Oct. 13, 2000). High Tech Workshop. BSU. (A technical workshop on Unigraphics and Rapid Prototyping for uncommitted BSU freshmen.)

Member. (1999). Department of Industry and Technology Outstanding Teaching Award Committee. (Note: Dr. Flowers could not complete all of his duties on this committee due to an appendectomy.)

Member. (1998). Subcommittee to develop a new minor in Construction Technology.

Member. (1998). Subcommittee to develop a new minor in Design.

Developed proposal (with Dr. Wes Baldwin) for a new Manufacturing Design and Automation Center for the Department of Industry and Technology. (1998).

Member. (1995-1996). Old Dominion University Library Collection Development Committee.

Author. (1995-1996). Over 50 different concentration sheets detailing the transition from a host of programs at Tidewater Community College to the Industrial Technology Program at Old Dominion University.

Student Advisor. (1992-1996). Industrial Technology and Technology Education Programs, Old Dominion University.

Graduate Teaching Assistant Supervisor. (1992-1996). Occupational and Technical Studies, Old Dominion University.

University Supervisor of Student Teachers. (1992-1996). Occupational and Technical Studies, Old Dominion University.

Team Advisor. (1992-1995). Manufacturing Team of Old Dominion University's Technology Education Collegiate Association

#### 7.1b **College**

Alternate, Teachers College Promotion and Tenure Committee, 2018 – present.

Member, Teachers College Dean Search Committee, 2017-2018.

Member, Teachers College Research Committee, 2017-2018.

Member, Teachers College Promotion and Tenure Committee, 2017-2018.

Member, CAST Salary Committee. 2012 – 2013.

Member, CAST Promotion and Tenure Committee, 2010-2011.

One of the CAST Pilot Testers for the Digital Measures faculty vita database. Jan. – Feb., 2010.

One of the CAST Representatives on the BSU Emerging Media Research Council, 2009-2010.

Department of Technology Representative, CAST Dean Search Committee, 2007-2008.

Faculty Advisor for an Appeal of a Decision by the College Promotion and Tenure Committee. March, 2006.

Representative from the College of Applied Sciences and Technology on the BSU Council on the Environment (2001-2005).

Member. Faculty OnLine Introduction and Orientation (FOLIO) Committee for the College of Applied Sciences and Technology (2003-2004).

Representative from the College of Applied Sciences and Technology on the BSU Distance Education Strategic Planning Committee (2000-2001).

Representative from the College of Applied Sciences and Technology on the BSU Teacher Education Committee (1998-2001).

Member of Old Dominion University's Darden College of Education Research and Scholarship Committee (1993-1995).

Member of Old Dominion University's Darden College Evaluation Committee (1992-1993).

#### 7.1c **University**

Co-chair, Faculty Council ad hoc Committee on Faculty Trustee (2018-2019).

Member, BSU Institutional Animal Care and Use Committee (Presidential appointment) (2001- Sept., 2018).

Senator, BSU University Senate (2017-2018)

Member, BSU Faculty Council (2017-2018)

Member, BSU Scholarship Advisory Committee (also called Fall Scholarship Committee). (2004-2013).

Presenter. (October 9, 2013). Creating Custom Intersections. Presentation at the Dinner Honoring the State Budget Committee, sponsored by the BSU President and Vice President for Business Affairs. (Also listed under 7.5)



Online Faculty Fellow, Integrated Learning Institute, BSU. (Fall 2011).

Member, BSU Emerging Media Curriculum Task Force. (2010-2011).

Presenter. (October 15, 2010). Rapid Prototyping & Sustainability: Connections for Accounting Professionals. Presentations to two sections of Dr. Gwendolen White's ACC 665 class. (Also listed under 7.5)

Worked with Dr. Michael Goldsby and others to make connections between the Entrepreneurship Program and Department of Technology courses in rapid prototyping and related areas. (2010-2011). (Also listed under 7.1a)

Member, Sciences Advisory Group for the BSU Information Technology Advisory Group (ITAG). (2008-2009)

Grant Reviewer for the 2009 round of BSU Emerging Media Research Grant Proposals. (Also listed in 6.6)

Member, Technology Enhanced Teaching in Distance Education Conference Planning Committee, School of Extended Education, BSU. (2006-2007).

Member, Curricular Instruments Advisory Council Subcommittee, and the Advisory Council for the Institute for Digital Fabrication, Center for Media Design, BSU. (2006-2007).

Member, Task Force on Improving Off Campus Courses, School of Extended Education, BSU. (2006).

Member, Distance Education Review Committee, BSU School of Extended Education. (2005-2006).

Member, Certificate Think Tank, BSU Graduate School and School of Extended Education Discovery Program. (2005-2006).

Guest Speaker. (May 24, 2005). Reusable Learning Objects. For TLA 165: Creating Learning Objects for Distance Education (run by Dr. Greg Siering through the Office of Teaching and Learning Advancement), BSU.

Member and Chair, School of Extended Education Faculty Input Group. (2003-2004).

Acting Chair, BSU Council On The Environment. (2004).

Member, Environmental Scanning Committee for the BSU Information Technology Advisory Group. (2003-2004)

Member, Distance Education Subcommittee of the Environmental Scanning Committee for the BSU Information Technology Advisory Group. (2003-2004)

Member, Clustered Minors Curriculum Committee, reporting to the Associate Provost, BSU. (2003-2004).

Online Education Consultant, Department of Natural Resources and Environmental Management, BSU (Sep. 27, 2004).

Member, BSU Cardinal Roundtable, under the Vice President for Student Affairs and Enrollment Management (2002-2003).

Green Initiatives Funding Specialist (appointment from the Provost) (2001-2002).

Member of the BSU Green Committee 2 (2000 - 2001). (Related item in 7.1c)

Member and Chair of the BSU Green Committee 2 Subcommittee: The Funders (2000 - 2001).

Member of the BSU Green Committee 2 Steering Committee (2000 - 2001).

Member of the BSU Blackboard Working Group (2000).

Member of the BSU Admissions and Credits Committee (1997-2000). Committee Chair (1998-2000).

Guest Speaker. (Oct. 20, 2000). Teaching Online at Ball State. Presentation to and Discussion with Music Education Faculty, Ball State University.

Participant, NCATE Planning Event, BSU Teacher's College, Minnetrista Cultural Center (Dec. 3, 1999).

Member, BSU Above and Beyond: Advancing Ball State University, Campus Community Campaign Committee (and Department of Industry and Technology Representative) (2000).

Member of the BSU Coordinating Committee on University Marketing and Enrollment Management (1999).

Guest Speaker. (Jan. 27, 1999). Furniture Woods and Finishes. ARCH 490, Ball State University.

Member of the BSU Women and Gender Studies Grants and Funding Committee. (1996 - 1998).

Participated in a faculty focus group on Strategic Enrollment Management and Communication for Ball State University, run by Lipman Hearne, Inc. (1997).

Member of Old Dominion University's Faculty Senate Committee I, Administration and Finance. (1995 - 1996).

Co-chair, Old Dominion University's Environmental Steering Committee. (1993-1994).

Member of Old Dominion University's Senate Committee A: Undergraduate Studies. (1993-1995).

Secured the donation of 12 computers from AT&T to the Department of Technology at Elizabeth City State University. (1991).

## 7.2 Professional Service Outside the University

### 7.2a Local

Volunteer. (Sept. 29, 2018). Living Lightly Fair. Muncie, IN. [www.livinglightlyfair.org](http://www.livinglightlyfair.org)

Volunteer. (Sept. 17, 2016). Living Lightly Fair. Muncie, IN. [www.livinglightlyfair.org](http://www.livinglightlyfair.org)

Volunteer. (Sept. 19, 2015). Living Lightly Fair. Muncie, IN. [www.livinglightlyfair.org](http://www.livinglightlyfair.org)

Volunteer. (2011). Living Lightly Fair. Muncie, IN. [www.livinglightlyfair.org](http://www.livinglightlyfair.org)

Webmaster. (2008). Living Lightly Fair. Muncie, IN. [www.livinglightlyfair.org](http://www.livinglightlyfair.org)

Display Presenter. (2001). TechKnowFest. Ivy Tech State College: Muncie, IN.

Competitive Event Coordinator: Web Page Design. (2001). Department of Industry and Technology Conference (serving students from area schools).

Workshop Presenter. (1999). Laser Machining and 3D Laser Scanning. Oct. 19, 1999, Department of Industry and Technology Conference (serving teachers from area schools).

Judge. (1999). Transportation competition. Fall, 1999, Department of Industry and Technology Conference (serving students from area schools).

Display Presenter. (1998). Staffed departmental milling displays (with Dr. Richard Seymour) at Tech Fest '98 at Ben Davis High School in Indianapolis, IN.

Workshop Leader (with Ms. Annette Rose). (1998) "Internet for Educators." Fall, 1998, Department of Industry and Technology Conference (serving teachers from area schools).

Judge. (1998). Construction competition. Department of Industry and Technology Conference (serving students from area schools).

Workshop Leader. (1997). "Creative problem solving: generating ideas." Department of Industry and Technology Conference (serving teachers from area schools).

Workshop Leader (with Ms. Annette Rose). (1996). "A mass production activity for Monday morning." Department of Industry and Technology Conference (serving teachers from area schools).

Workshop Leader. (1996) "Computer integrated manufacturing." Department of Industry and Technology Conference (serving teachers from area schools).

Consultant. (1997). Technology Education Program. Muncie Central High School.

Member. (1994-1995). Vocational Education Advisory Group for Norfolk Prime, Norfolk Public Schools.

**Dr. Flowers** established a new program between the Technology Education Program at Old Dominion University and the Norfolk Junior Achievement. Twelve Technology Education majors were placed and supervised (by **Dr. Flowers**) as J/A instructors between 1992 and 1994.

Consultant. (1993). Technology Education, Mapp Junior High School, Portsmouth Public Schools, Portsmouth, VA.

Consultant. (1993-1996). Technology Education Department, Norview High School, Norfolk Public Schools, Norfolk, VA.

Member. (1991-1992). Technology Education Advisory Council, Northeastern High School, Elizabeth City, NC.

## 7.2b **State/Regional**

Member, Advanced Manufacturing Council. (2014-Present). OrthoWorx. Warsaw, IN.

Member. (2004-2005). Learning Objects Task Force. Indiana Higher Education Telecommunications System.

Issue Editor. (1998). *Technology Education Report*, 10(3). Technology Educators of Indiana.

Member. (1996-1998). Publications Committee, *Technology Education Report*, Technology Educators of Indiana.

Judge. (1996). Technology Education Collegiate Association Midwest Regional Conference.

Issue Editor. (1996-1997). *Technology Education Report*, 9(2). Technology Educators of Indiana.

Member. (1996). Virginia Technology Education Association Teacher of the Year Selection Committee.

Coordinator. (1995). Problem Solving I and Problem Solving II Events, Technosphere '95, Richmond, VA. (Technology Student Association members from across the state competed.)

Member. (1992-1996). Publications Committee, Virginia Council on Technology Teacher Education.

Member in Charge of General Sessions. (1994). Summer Conference of the Virginia Technology Education Association,

Chair. (1994). Committee to Select Teacher of the Year, Virginia Technology Education Association.

Judge. (1994). Problem Solving Competition, Eastern Regional Technology Education Collegiate Association Conference.

Member. (1993). Committee to Select Teacher of the Year, Virginia Technology Education Association.

Chair. (1993). Committee to Select Virginia Technology Student Association Program of the Year

Chair. (1993). Committee to Select Virginia Technology Student Association Advisor of the Year

Team Leader for Recognition Programs. (1993). Technosphere '93 Virginia Technology Student Association Conference, Richmond, VA.

Judge of Student Competitions. (1993). Technosphere '93 Virginia Technology Student Association Conference, Richmond, VA.

Member. (1991-1992). Technology Education Curriculum Advisory Board, North Carolina Department of Public Instruction.

#### 7.2c **National**

2012. External reviewer for faculty candidate for tenure and promotion. Northern Illinois University.

Editorial Review Board Member (2000 – 2011); Assistant Editor. (2000 – 2009). *Journal of STEM Teacher Education*, formerly, the *Journal of Industrial Teacher Education*. (Related item in 6.6)

Member and Reviewer. (2001-2006). Research Committee, Technology Education Division, NAITTE.

Accreditation Team Member. (2000 - 2002). NAIT.  
(<http://www.nait.org/accred/2001TeamMembers.html>)

Candidate. (1998). Vice President for Technology Education, National Association of Industrial and Technical Teacher Education.

## 7.2d International

Member. (2018). Curriculum committee. Council on Technology and Engineering Teacher Education.

Chapter Reviewer. (2018). (Review of a book chapter manuscript for) Interdisciplinary and International Perspectives on 3D Printing in Education. IGI Global. (Related item in 6.6)

Member. (2017 - Present). Editorial Board. *Journal of Technology Education*. (Related item in 6.6)

Reviewer. *International Journal of Doctoral Studies*. (2007-Present) (Related item in 6.6)

Member. (2012). International Program Committee. IASTED International Conference on Web-based Education (WBE 2013). The International Association of Science and Technology for Development. Innsbruck, Austria, February 13 - 15, 2013. (Related item in 6.6)

Member. (2011). International Program Committee. IASTED International Conference on Technology for Education (TE 2011). The International Association of Science and Technology for Development. Dallas, TX, December 14 - 16, 2011. (Related item in 6.6)

Member. (2011). International Program Committee. The Ninth IASTED International Conference on Technology for Education and Learning (TEL 2011). The International Association of Science and Technology for Development. Beijing, China, October 24 - 26, 2011. (Related item in 6.6)

Member. (2009 - 2010). International Program Committee. The Ninth IASTED International Conference on Web-Based Education. The International Association of Science and Technology for Development. Sharm El Sheikh, Egypt, March 15-17, 2010. (Related item in 6.6)

Member. (2008 - 2009). International Program Committee. The Eighth IASTED International Conference on Web-Based Education. The International Association of Science and Technology for Development. Phuket, Thailand, March 16-18, 2009 (Related item in 6.6)

Member. (2006 - 2009). International Review Board. *International Journal of Doctoral Studies*. (Related item in 6.6)

Member. (2007 - 2008). International Program Committee. The Seventh IASTED International Conference on Web-Based Education. The International Association of Science and Technology for Development. Innsbrook, Austria (Related item in 6.6)

Member. (2006 - 2007). International Program Committee. The Sixth IASTED International Conference on Web-Based Education. The International Association of Science and Technology for Development. (Related item in 6.6)

Member. (2005 - 2006). International Program Committee. The Fifth IASTED International Conference on Web-Based Education. The International Association of Science and Technology for Development. (Related item in 6.6)

Member. (2006 - 2007). Teacher Preparation Committee, Council on Technology Teacher Education.

Member. (1996 - 2007). Editorial Advisory Board, *TIES* Magazine. (Related item in 6.6)

Member. (2002-2003). Elections Committee, ITEA.

Member. (2000 - 2003). Research Committee, CTTE.

Member. (1995 - 2000). Undergraduate Studies Committee, CTTE.

Member. (1997 - 1998). Nominations and Elections Committee, TECC.

Member. (1997 - 1998). Special Awards Committee, TECC.

Moderator. (1998). CTTE roundtable presentations. International Technology Education Association Annual Conference, Fort Worth, TX.

Moderator. (1997). CTTE roundtable presentations. International Technology Education Association Annual Conference, Charlotte, NC.

Chair. (1996 - 1997). Publications Committee, ITEA.

### 7.3 Honors and Awards



2017 Technology and Engineering Teacher Educator of the Year Award, Council on Technology and Engineering Teacher Education. Awarded March 16, 2017. (International)

2016 Gerald E. Day outstanding Writing Award from the International Technology and Engineering Educators Association for Samuels, K.\*, & **Flowers, J.** (2015). 3D printing: Exploring capabilities. *Technology and Engineering Teacher*, 74(7), 17-21. Awarded March 2, 2016. Kyle Samuels was a graduate student at the time of writing.

2011 Silvius-Wolansky Outstanding Publication Award from the Council on Technology Teacher Education for: 'The Problem in Technology Education (A Definite Article.)' <http://scholar.lib.vt.edu/ejournals/IITE/v21n2/pdf/flowers.pdf> Awarded March 16, 2012.

Online Faculty Fellow. Integrated Learning Institute, BSU. Fall, 2011.

Outstanding Research Article Award, National Association of Industrial and Technical Teacher Educators, awarded December 15, 2007, for: **Flowers, J.**, & Baltzer, H.\* (2006). Hiring technical education faculty: Vacancies, criteria, and attitudes toward online doctoral degrees. *J. of Industrial Teacher Education*, 43(3), 29-44. Retrieved December 17, 2007 from <http://scholar.lib.vt.edu/ejournals/IITE/v43n3/pdf/flowers.pdf>

Rawlings Outstanding Distance Education Teaching Award, BSU, September 13, 2006.

Technology Fellow, College of Applied Sciences and Technology, BSU, 2000-2001. (Related item in 6.4)

Technology Fellow, College of Applied Sciences and Technology, BSU, 1999-2000. (Related item in 6.4, 7.1a)

Outstanding Teacher Award, Department of Industry and Technology, BSU, May 9, 1998.

Most Inspiring Faculty Award, Darden College of Education, Old Dominion University, December 14, 1996.

#### 7.4 Professional Memberships

Member, Council on Technology and Engineering Teacher Education (CTETE)

Member, International Technology and Engineering Educators Association (ITEEA)

Previous membership was held in the following:

- Association of Career & Technical Education (ACTE)
- Association of Technology, Management, and Applied Engineering (ATMAE)
- E Technology Educators of Indiana (E/TEI)
- Epsilon Pi Tau (EPT)
- Forest Products Research Society (FPRS)
- Guild of American Luthiers (GAL)
- Indiana Distance Learning Association (InDLA)
- Institute of Wood Science (Associate Member) (England)
- Iota Lambda Sigma (ILS)
- Laser Institute of America (LIA)
- National Association of Industrial and Technical Teacher Education (NAITTE)
- National Association of Industrial Technology (NAIT)
- Sloan Consortium
- Society of Wood Science and Technology (SWST)
- Technology Education for Children Council (TECC)
- Usability Professionals Association (UPA)
- Virginia Technology Education Association (VTEA)
- Virginia Council on Technology Teacher Education (VCTTE)

## 7.5 Professional Presentations to Community Groups

Co-Presenter with Cody Blackford\* and Lindsey Miles\*. (September 29, 2018). Green Prototyping and Upcycling. Living Lightly Fair. Muncie, IN.

Co-Presenter with Alex Wierzbicki\*. (November 17, 2016). Rapid Prototyping Technologies. PhyxTgears Mechanical Team, Indiana Academy, with Hai Nguyen. Muncie, IN.

Lead Presenter with Cale Rauch\* and Alex Wierzbicki\*. (September 17, 2016). Green Prototyping and Upcycling. Living Lightly Fair. Muncie, IN.

Presenter. (August 26, 2014). Rapid Prototyping Technologies. Presentation to Dr. Renmei Xu's ITGRA 480 class. (Also listed under 7.1a)

Co-Presenter with Dr. Edward Lazaros. (November 11, 2013). Online Master of Arts Degrees in Technology Education and Career and Technical Education from Ball State University. Live video presentation sponsored by the BSU Division of Online

and Distance Education. (Also listed under 7.1a)

Presenter. (October 9, 2013). Creating Custom Intersections. Presentation at the Dinner Honoring the State Budget Committee, sponsored by the BSU President and Vice President for Business Affairs. (Also listed under 7.1c)

Co-Presenter with Dr. Edward Lazaros. (May 14, 2013). Online Master of Arts Degrees in Technology Education and Career and Technical Education from Ball State University. Live video presentation sponsored by the BSU Division of Online and Distance Education. (Also listed under 7.1a)

Co-Presenter with Dr. Edward Lazaros. (March 19, 2013). Online Master of Arts Degrees in Technology Education and Career and Technical Education from Ball State University. Live video presentation sponsored by the BSU Division of Online and Distance Education. (Also listed under 7.1a)

Presenter. (January 10, 2013). Rapid Prototyping Technologies. Presentation to Dr. Renmei Xu's ITGRA 480 class. (Also listed under 7.1a)

Presenter. (November 13, 2012). Laser Scanning, Digitizing, and Reverse Engineering. Presentation to Dr. Mary Annette Rose's TDPT 102 class. (Also listed under 7.1a)

Presenter. (March 19, 2012). The effect of board grade on yellow-poplar millwork cutting yield, and other research endeavors. Presentation to Dr. Mary Annette Rose's ITEDU 410 class. (Also listed under 7.1a)

Presenter. (December 6, 2011). Rapid Prototyping for Entrepreneurship Students. Presentation to faculty and business representatives from Nova Scotia, Canada.

Presenter. (September 1, 2011). Rapid Prototyping Laboratory. Presentation to Dr. Renmei Xu's ITGRA 480 class. (Also listed under 7.1a)

Co-Presenter with Dr. Samuel Cotton. (April 5, 2011). Online Master of Arts Degrees in Technology Education and Career and Technical Education from Ball State University. Live video presentation sponsored by the BSU School of Extended Education. (Also listed under 7.1a)

Co-Presenter with Dr. Samuel Cotton. (January 25, 2011). Online Master of Arts Degrees in Technology Education and Career and Technical Education from Ball State University. Live video presentation sponsored by the BSU School of Extended Education. (Also listed under 7.1a)

Online Education in Technology Education. Presentation to undergraduate students in the Department of Technology at State University of New York College at Buffalo. (October 27, 2010).

Co-Presenter with Dr. Samuel Cotton. (October 13, 2010). Online Master of Arts Degrees in Technology Education and Career and Technical Education from Ball State University. Live video presentation sponsored by the BSU School of Extended Education. (Also listed under 7.1a)

Presenter. (September 21, 2010). Laser Machining, Laser Scanning & Rapid Prototyping. Presentations to two sections of Dr. Edward Lazaros' ITGRA 184 class. (Also listed under 7.1c)

Co-Presenter with Dr. Samuel Cotton. (June 1, 2010). Online Master of Arts Degrees in Technology Education and Career and Technical Education from Ball State University. Live video presentation sponsored by the BSU School of Extended Education. (Also listed under 7.1a)

Presenter. (March 2, 2010). Rapid Prototyping. Presentation to Dr. Renmei Xu's ITGRA 480 class. (Also listed under 7.1a)

**Flowers, J.** (1999). Laser Machining and 3D Laser Scanning Technologies. Six presentations to groups of students and teachers from Anderson Highland High School. Oct. 15, 1999 and Nov. 12, 1999.

**Flowers, J.** (1992). New and Emerging Technologies. Presentation to the Technologies Group, Bertie High School, Bertie, NC, Mar., 1992.

## 7.6 Other

Featured in "The case for fully enfranchised remote faculty" in *Distance Education Report*, 16(18), 1-6.

Featured in "Professor Highlights: Susan M. Tancock and Jim Flowers" *North*, 3(2), 98-99, (November – December 2011).

Interviewed for "Ball State University is early adopter of Web conferencing for collaborative teaching and learning," December 2, 2006, Indiana Higher Education Telecommunications System:

[http://www.ihets.org/news/ihets\\_releases/2006/12-04-06BSUclips.html](http://www.ihets.org/news/ihets_releases/2006/12-04-06BSUclips.html)

(Interview online at

[http://mediaserver.ihets.org/vod/IHETS/training/ii/JimFlowers2\\_Dec2006.wmv](http://mediaserver.ihets.org/vod/IHETS/training/ii/JimFlowers2_Dec2006.wmv))

Sole interviewee for the following article: Street, T. (2001). Ball State “going the distance” in online education. Campus Spotlight, Chalkdust, 4(2): [http://www.bsu.edu/CTT/ChalkDust/fall\\_01/campusspot\\_v4i2.html](http://www.bsu.edu/CTT/ChalkDust/fall_01/campusspot_v4i2.html)

Sole interviewee and subject for the following article: Barker, A. (Oct 5, 1998). Women should feel welcome in technology. Update, The Official Newspaper for Employees of Ball State University, 19(7), 1.