

REFERENCES

- AAUW (American Association of University Women). 1992. *How Schools Shortchange Girls*.
- AAUW Educational Foundation and National Education Association.
- Adelman, C.1998. *Women and Men of the Engineering Path: A Model for Analyses of Undergraduate Careers*. Washington, D.C.: U.S. Department of Education.
- Anderson, V. 1995. "Identifying Special Advising needs of Women Engineering Students." *The Journal of College Student Development* 36(4).
- Astin, A. 1985. Student involvement: A developmental theory for higher education. *Journal of College Student Personnel* 25: 297-308.
- Astin, A. W. and Astin, H.S. 1993. *Undergraduate Science Education: The Impact of Different College Environments on the Educational Pipeline in the Sciences*. Los Angeles: HERI UCLA.
- Bergvall, Victoria L., Sheryl A. Sorby, and James B. Worthen. 1994. "Thawing the Freezing Climate for Women in Engineering Education: Views from Both Sides of the Desk" *Journal of Women and Minorities in Science and Engineering*, vol. 1, pp.323-346.
- Besterfield-Sacre, Mary, Cynthia Atman and Larry Shuman. 1997. "Characteristics of Freshman Engineering Students: Models for Determining Student Attrition in Engineering." *Journal of Engineering Education* 86:2 (April): 139-49.
- Blaisdell, Stephanie. 1998. "Predictors of Women's Entry into Engineering: Why Academic Preparation is Not Sufficient." *WEPAN National Conference Proceedings*.
- Boyce, Mary et. al. 2002. *Report of the Committee on Women Faculty in the School of engineering at MIT* (March). Boston: MIT.
- Brainard, S. G., S. S. Metz, and G. M. Gillmore, 1998. "WEPAN Pilot Climate Survey." <http://www.wepan.org/climate.html>
- Brainard, Suzanne G. and Penelope Huang. 2002. *University of Washington Climate Survey: Exploring the Environment for Undergraduate Engineering Students, 2002*, A Final Report to the ECSEL Coalition. University of Washington: October.
- Busch-Vishniac, Ilene and Jeffrey P. Jarosz. 2003. "Deconstructing Engineering Education Programs to Foster Diversity (DEEP)." *Proceedings of the American Society for Engineering Education (ASEE) National Conference 2003*, Nashville, TN (August).
- Camp, W.G. 1990. "Participation in Student Activities and Achievement: A Covariance Structural Analysis." *Journal of Educational Research* 83: 275-278.
- Cerro, Gerardo del and Naphysah O. Duncan, 2002. "Assessing Success: Female Engineers at the Cooper Union". Paper presented at ASEE National Conference and published in the Conference Proceedings (Montreal, June).
- Clewell, Beatriz Chu and Patricia B. Campbell. 2002."Taking Stock: Where We've Been, Where We Are, Where We're Going." *Journal of Women and Minorities in Science and Engineering*," 8:255-284.
- Collins, Deborah, Alan E. Bayer and Deidre A. Hirschfeld, 1996. "Engineering Education for Women: A Chilly Climate?" *1996 WEPAN National Conference Proceedings*, pp. 323-8.
- Commission on the Advancement of Women and Minorities in Science, Engineering and Technology (CAWMSET). 2000. *Land of Plenty: Diversity as America's Competitive Edge in Science, Engineering and Technology*. Washington, D.C.: Congressional Commission on the Advancement of Women and Minorities in Science, Engineering and Technology Development.
- Crawford, M. and M. Macleod. 1990. "Gender in the College Classroom: An Assessment of the 'Chilly Climate' for Women." *Sex Roles* 23(3/4): 101-122.

- Cunningham, Christine M., Cathy Lachapelle, Meredith Thompson, Mario Delci and Irene Goodman. 2000. "Factors Encouraging and Discouraging Undergraduate Women in Engineering: Results from a National, Web-Based Study." Paper presented at the Annual meeting of the American Educational Research Association, New Orleans.
- Davis, Cinda-Sue and Sue V. Rosser .1996. "Program and Curricular Interventions." Ch. 7 in Cinda-Sue Davis, Angela B. Ginorio, Carol S. Hollinshead, Barbara B. Lazarus, Paula M. Rayman & associates, *The Equity Equation*. San Francisco: Jossey-Bass Publishers.
- Dresselhaus, Mildred S., Judy R. Franz, and Bunny C. Clark. 1994. "Interventions to Increase the Participation of Women in Physics." *Science*, 263:1392-1393.
- Etzkowitz, Henry, Carol Kemelgor and Brian Uzzi. 2000. *Athena Unbound: The Advancement of Women in Science and Technology*. Colorado: Westview Press.
- Farrell, Elizabeth F. 2002. "Engineering a Warmer Welcome for Female Students." *The Chronicle of Higher Education*, February 22.
- Fausto-Sterling, A. 1991. "Race, Gender and Science." *Transformations 2*: 4-12.
- Felder, R.M. et. al. 1993. "A Longitudinal study of Engineering Student performance and Retention. I. Success and Failure in the Introductory Course." *Journal of Engineering Education*, 82(1):15-21.
- _____. 1995. "A Longitudinal Study of Engineering student Performance and Retention. III. Gender Differences in Student Performance and Attitudes." *Journal of Engineering Education* 84(2):151-174.
- Ginorio, A.B. 1995. *Warming the Climate for Women in Academic Science*. Washington, D.C.: Association of American Colleges and Universities.
- Goodman, I. et. al. 2002. *Final Report of The Women's Experiences in College Engineering (WECE) Project*. Cambridge, MA: Goodman Research Group, Inc.
- Hall, Roberta M. and Bernice Sandler, 1982. *The Classroom Climate: A Chilly One for Women?* Washington, D.C.: Association of American Colleges, Project on the Status and Education of Women.
- Haller, Cynthia R. et. al., 2000. "Dynamics of Peer Education in Cooperative Learning Workgroups." *Journal of Engineering Education* 89 (3): 285-293.
- Hanson, Sandra L. 1996. *Lost Talent: Women in the Sciences*. Philadelphia: Temple University Press.
- Harding, S. 1991. *Whose Science? Whose Knowledge? Thinking from Women's Lives*. Ithaca, NY: Cornell University Press.
- Hartman, Harriet. 2001. "A Gender Lens on Rowan University's College of Engineering." Paper presented at NAMEPA/WEPA Annual Conference, Alexandria, VA, April.
- Hartman, Harriet & Moshe Hartman. 2001. "The Role of Self-Confidence in Undergraduate Engineering Education: Gender Differences at Rowan." Paper presented at the American Sociological Association meetings, Anaheim, August.
- _____. 2002. "Comparing Female and Male Experiences in the Rowan Undergraduate Engineering Program". *Proceedings of ICWES 12th Annual Conference*, Ottawa, July.
- Hathaway, Russell S., Cinda-Sue Davis, Sally Sharp. 2000. "WISE-RP Rules: Increasing Women's Retention in the Sciences." Paper presented at the Annual Forum of the Association for Institutional Research, Cincinnati, May.
- Hauser, Robert and John Warren, 1996, *Socioeconomic Indexes for Occupations: A Review, Update, and Critique*. Madison, WI: Center for Demography and Ecology, University of Wisconsin-Madison, Working Paper No. 96-01.
- Henes, R., M. Bland, J. Darby, K. McDonald, 1995. "Improving the Academic Environment for Women Engineering Students through Faculty Workshops." *Journal of Engineering Education*. January.
- Henwood, Flis. 1998. "Engineering Difference: Discourses on Gender, Sexuality and Work in a College of Technology." *Gender and Education* 10(1): 35-50.

Hewitt, N.M. and E. Seymour. "Factors Contributing to High Attrition Rates Among Science and Engineering Undergraduate Majors" In *The Problems of Women in Science, Mathematics and Engineering*. Cited at [http://www.umbc.edu/wmst/women's issues/science/technology](http://www.umbc.edu/wmst/women's%20issues/science/technology).

Hoffer, Thomas, Kenneth Rasinski, Whitney Moore. 1995. "Social Background Differences in High School Mathematics and Science Coursetaking and Achievement". U. S. Dept. of Education, Office of Educational Research and Improvement, NCES 95-206 (Statistics in Brief).

Hollenshead, C.S. et. al. 1996. "The Graduate Experience in the Sciences and engineering: Rethinking a Gendered Institution." Pp. 122-162 in C.S. Davis, et. al. (eds.). *The Equity Equation: Fostering the Advancement of Women in the Sciences, Mathematics, and Engineering*. San Francisco: Jossey-Bass.

Huang, Gary, Nebiyu Taddese, Elizabeth Walter and Samuel S. Peng, 2000, *Entry and Persistence of Women and Minorities in College Science and Engineering Education*, Washington, D.C.: National Center for Education Statistics: Research and Development Report 2000-601.

Jackson, Linda A., Philip D. Gardner and Linda A. Sullivan, 1993. "Engineering Persistence: Past, present and future factors and gender differences". *Higher Education* 26: 227-246.

Jahan, Kauser ,et. al., 2001. "Design and research Across the Curriculum: The Rowan Engineering Clinics. *International Conference on Engineering Design*. Glasgow, Scotland.

Johnson, E.S. 1993. "College Women's Performance in a Math-Science Curriculum." *College and University* Spring/Summer: 74-78.

Johnson, F. S., Hutto, D. and Marchese, A. J. (2001). Engineering Education in New Contexts: Creating and Improving A Multidisciplinary Learning Environment. Writing Across the Curriculum Conference, Indianapolis, IN, May 2001.

Kahle, Jane Butler and Judith Meece. 1994. "Research on Gender Issues in the Classroom" in Dorothy Gable (Ed.), *Handbook of Research on Science Teaching and Learning*. New York: MacMillan Publications.

Kramarae, C. and P. Treichler. 1990. "Power Relationships in the Classroom." Pp.41-59 in S. L. Gabriel and I. Smithson (Eds.), *Gender in the Classroom: Power and Pedagogy*. Urbana: University of Illinois Press.

Kuh, G. et al 1991. *Involving Colleges*. San Francisco: Jossey-Bass.

Lantz, Alma. 1982. "Women Engineers: Critical Mass, Social Support, and Satisfaction." *Engineering Education* 72 (5): 295-6.

Layne, P. et. al. 2002. "The Role of Technical societies in the Recruitment, retention, and Advancement of Women Engineers." *Proceedings of ICWES 12th Annual Conference*, Ottawa, Canada (July).

Layzer, David. 1992. "Why Women (and Men) Give Up in Science," Pp.36-47 in H. Ausell and J. Wilkinson (eds.), *On Teaching and Learning*, v.4. Cambridge, MA: Derek Bok Center for Teaching and Learning, Harvard University.

Lazarus, Barbara, and Indira Nair. 1996. "Bridging the Gender Gap in Engineering and Science: The case for Institutional Transformation." *WEPAN National Conference Proceedings*.

Leder, G. C., and E. Fennema. 1990. "Gender Differences in Mathematics: A Synthesis," pp.188-200 in E. Fennema and G. C. Leder (Eds.), *Mathematics and Gender*. New York: Teachers College Press.

Lenning, Oscar and Larry Ebbers. 1999. "The Powerful Potential of Learning Communities: Improving Education for the Future." *ASHE-ERIC Higher Education Report* 26(6).

Manis, Jean M., Barbara F. Sloat, Nancy G. Thomas, & Cinda-Sue Davis. 1989. *An Analysis of Factors Affecting Choices of Majors in Science, Mathematics and Engineering at the University of Michigan*. University of Michigan, MI: Center for Continuing Education of Women.

- Marchese, A. J., Schmalzel, J. L, Mandayam, S. A. and Chen, J. C. (2001) A Venture Capital Fund for Undergraduate Engineering Students at Rowan University. *Journal of Engineering Education*. Vol. 90, No. 4, pp. 589-596.
- Margolis, Jane and Allan Fisher. 2003. *Unlocking the Clubhouse: Women in Computing*. Cambridge, MA: MIT Press.
- Mayberry, Maralee. 2001. "Reproductive and Resistant Pedagogies: The Comparative roles of Collaborative Learning and Feminist Pedagogy in Science Education." Pp. 145-157 in Maralee Mayberry, Banu Subramaniam and Lisa H. Weasel (eds.), *Feminist Science Studies: A New Generation*. New York: Routledge.
- McIlwee, J.S. and J.G. Robinson. 1992. *Women in Engineering: Gender, Power and Workplace Culture*. Albany, NY: State University of New York Press.
- McIntosh, Peggy. 1983. *Interactive Phases of Curricular Re-Vision: A Feminist Perspective*. MA: Wellesley College Center for Research on Women.
- Nair, Indira and Sara Majetich. 1995. "Physics and Engineering in the Classroom." Pp.25-42 in S. Rosser (ed.), *Teaching the Majority: Breaking the Gender Barrier in Science, Mathematics, and Engineering*. New York. Teachers College Press.
- Nakao, Keiko and Judith Treas. 1994. Updating Occupational Prestige and Socioeconomic Scores: How the New Measures Measure Up. Pp. 1-72 in *Sociological Methodology, 1994* edited by Peter Marsden. Washington, D.C. American Sociological Association.
- National Center for Education Statistics (NCES). 2003. *The Condition of Education 2003*. Washington, D.C.: U.S. Department of Education, Institute of education Sciences NCES 2003-067.
- National Research Council, Committee on Women in Science and Engineering. 1994. *Women Scientists and Engineers Employed in Industry: Why So Few?* Washington, DC: National Academy Press.
- National Science Foundation, 1994. *Women, Minorities, and Persons with Disabilities in Science and Engineering* (NSF No. 94-333HL). Washington, D.C.: National Science Foundation.
- National Science Foundation. 1992. *Women and Minorities in Science and Engineering: An Update*. Washington, D.C.: NSF.
- Oakes, J. 1990. "Opportunities, Achievement, and Choice: Women and Minority Students in Science and Mathematics." *Review of Research in Education* 16: 153-222.
- O'Hara, S.K. 1995. "Freshmen women in engineering: Comparison of Their Backgrounds, Abilities, Values, and Goals with science and Humanities Majors." *Journal of Women and Minorities in Science and Engineering* 2:33-47.
- Pascarella, E.T. and P.T. Terenzini. 1991. *How College Affects Students*. San Francisco: Jossey-Bass.
- Peterman, Dana. 2000. "First-Generation College Students." *Community College Journal of Research and Practice* 24(5): 417-21.
- Pike, Gary R. 1993. "The Relationship between Perceived Learning and Satisfaction with College: An Alternative View." *Research in Higher Education* 34(1): 23-41.
- Pike, Gary R., Charles Schroeder and Thomas Berry. 1997. "Enhancing the Educational Impact of Residence Halls: The Relationship between Residential Learning Communities and First-Year College Experiences and Persistence." *Journal of College Student Development*.38: 609-621.
- Rayman, Paula, and Belle Brett. 1993. *Pathways for Women in the Sciences*. Wellesley, MA: Wellesley College Center for Research on Women.
- _____ 1995. "Women Science Majors: What Makes a Difference in Persistence After Graduation?" *Journal of Higher Education* 66(4): 388-414.
- Rinehart, Jan and Karan Watson. 1998. "A Campus Climate Survey at Texas A&M University." *Proceedings of the 1998 WEPAN National Conference* 93-99.

- Robinson, Debra and Barbara Reilly. 1993. "A Study of Educational preparation and Professional Success." *Journal of Engineering Education* 82 (4): 196-202.
- Ross, K. 1994. *Women in Engineering: The Undergraduate Years*. Ph.D. Dissertation, SUNY Albany, School of Education.
- Rosser, Sue V. 1991. *Female Friendly Science*. Columbia, NY: Teacher's College Press.
- _____. 1995. "Introduction. Reaching the Majority: Retaining Women in the Pipeline." Pp.1-24 in S. Rosser (ed.), *Teaching the Majority: Breaking the Gender Barrier in Science, Mathematics, and Engineering*. New York. Teacher's College Press.
- _____. 2001. "Will EC2000 Make Engineering More Female Friendly?" *Women's Studies Quarterly* 3-4: 164-186.
- Rusch, Edith, A. (2002). The [un]changing world of school leadership: From discourse to practice. In G. Perreault & F. Lunenburg (Eds.). *The changing world of school administration* Lanham, MD: Scarecrow.
- Sax, Linda. 1994. "Mathematical Self-Concept: How College Reinforces the Gender Gap." *Research in Higher Education* 35 (2): 141-166.
- _____. 1996. "The Dynamics of 'Tokenism'" How College Students Are Affected by the Proportion of Women in Their Major." *Research in Higher Education* 37(4): 389-425.
- _____. 2001. "Undergraduate Science Majors: Gender Differences in Who Goes to Graduate School." *The Review of Higher Education* 24(2): 153-172.
- Schaefer, Kathleen G., Douglas L. Epperson, and Margaret M. Nauta. 1997. "Women's Career Development: Can Theoretically Derived Variables Predict Persistence in Engineering Majors?" *Journal of Counseling Psychology* 44(2): 173-183.
- Schlossberg, Nancy. 1989. "Marginality and Mattering: Key Issues in Building Community." *New Directions for Student Services* 48: 5-15.
- Schmalzel, J., A.J. Marchese, J. Mariappan, and S. Mandayam . 1998. "The Engineering Clinic: A Four-Year Design Sequence." 2nd Annual Conference of National Collegiate Invention and Innovation Alliance. Washington, D.C.
- Siann, Gerda and Margaret Callaghan. 2001. "Choices and barriers: Factors Influencing Women's Choice of Higher education in Science, Engineering and Technology." *Journal of Further and Higher Education* 25(1).
- Seymour, Elaine and Nancy M. Hewitt. 1997. *Talking About Leaving: Why Undergraduates Leave the Sciences*. Colorado: Westview Press.
- Seymour, Elaine. 1995. "Revisiting the problem iceberg: Science, mathematics, and engineering students till chilled out: Examining the causes of student attrition in science-based fields on a variety of campuses." *Journal of College Science Teaching* 24 (6): 392-400.
- Sonnert, Gerhard. 1995. *Who Succeeds in Science?* New Brunswick, New Jersey: Rutgers University Press.
- Stage, Frances K. 1989. "Reciprocal Effects Between the Academic and Social Integration of College Students." *Research in Higher Education* 30: 517-30.
- Steele, Claude M. 1997. "A Threat in the Air: How Stereotypes Shape Intellectual Identity and Performance." *American Psychologist* 52(6): 613-629.
- Strenta, C. A., R. Elliot, R. Adair, M. Marler, and J. Scott . 1994. "Choosing and Leaving Science in Highly Selective Institutions." *Research in Higher Education* 35(5): 513-47.
- Tannen, Deborah (ed.) 1993. *Gender and Conversational Interaction*. New York: Oxford University Press.
- Terenzini, P.T. et. al. 1994. "The Transition to College: Diverse Students, Diverse Stories." *Research in Higher Education* 35(1): 57-73.
- _____. et. al., 1996. "First-Generation College Students: Characteristics, Experiences, and Cognitive Development." *Research in Higher Education* 37 (1): 1-22.

- Tinto, V. 1993. *Leaving College: Rethinking the Causes and Cures of Student Attrition*. Chicago: U of Chicago.
- Tobias, Sheila. 1990. *They're Not Dumb, They're Different*. Tucson, AZ: Research Corporation.
- Tonso, Karen-L. 1998. "Engineering Gender--Gendering Engineering: What About Women in Nerd-Dom?" Paper presented at the Annual Meeting of the American Educational Research Association, San Diego, CA, April.
- Treisman, U. 1992. "Studying Students Studying Calculus: A Look at the Lives of Minority Mathematics Students in College." *The College Mathematics Journal* 23(5): 362-72.
- Van T. Bui, Khanh. 2002. "First-Generation College Students at a Four-Year University: Background Characteristics, Reasons for Pursuing Higher Education, and First-Year Experiences." *College Student Journal* 36(1):3-12.
- Widnall, Sheila. 2004. "Digits of Pi: Barriers and Enablers for Women in Engineering." Presentation at S.E. Regional National Association of Engineers meeting, Georgia.
- Young, Dana, 2004. "Women Vastly Underrepresented in Academia." *Womens E-news*, January 14.
- Zeldin, Amy and Frank Pajares. 2000. "Against the Odds: Self-Efficacy Beliefs of Women in Mathematical, Scientific, and Technological Careers." *American Educational Research Journal*. 37(1): 215-246.
- Zwerling, L.S. and H.B. London. 1992. *First-Generation Students: Confronting the Cultural Issues*. San-Francisco: Jossey-Bass.