Family and consumer studies professors Cheryl Wright and Marissa Diener are heads of the iSTAR program (www.istar.utah.edu), a strengths-based and family-focused educational/research program to develop technology talent in youth with ASD. One of their primary goals is to help youth with ASD and their families identify strengths that can be a foundation for creative, collaborative and job skills. Diener and Wright have worked with students from 8-19 years old, teaching them 3-D technology and developing personal portfolios to illustrate their skills. The foundational software, SketchUp Make, is a 3D freeware design program used by architects, engineers, game designers, and other professions. iSTAR uses a community-based research model, with a multidisciplinary team across four colleges (Nursing, Social & Behavioral Science, Health, and Education). SketchUp has been offered at summer camps for 3 summers, university-based afterschool workshops, and school-based programs (since 2010). The program has been replicated in The Dalles, Oregon (rural, income diversity) and Orlando, Florida (ethnic diversity). There is also a planned replication in Boulder, CO (private and public school settings). The program uses multiple contexts to promote social engagement including family (parents, siblings, grandparents), school environments (peers, teachers) and in a computer lab with similar peers.

Preliminary Data
Preliminary data indicates that enrollment in iSTAR results in increased computer skills, social engagement (parents, siblings, grandparents) and creativity. Diener and Wright have seven scholarly papers associated with their research project. Two of the seven have been published on family and grandparent participation (focus groups and interviews) and one is a major review paper on ASD issues in adulthood. They have two manuscripts under review that highlight the sibling involvement (interviews) and the development of a visual-spatial creativity assessment (in collaboration with their corporate partners). They also have two papers in process that highlight the learning culture of iSTAR and the social engagement of the students (both based on observational coding).

Innovation
The program focuses on the cultivation of strengths and abilities of youth with ASD rather than focusing on disabilities. It uses a natural learning environment to facilitate authentic social engagement and skill development based on shared interests.

Collaborations/Business Partners
Diener and Wright have research collaborations with University of Central Florida and corporate collaborators from ***Google, Universal Creative and Trimble***. They have worked this year with team of graduate students at the University of Utah Lassonde Entrepreneurial Center to develop a business plan for self-sustaining the program. The iSTAR program is one of four projects selected at the U of U for RocketHub (crowdfunding).

Funding
iSTAR has received internal funding (U of U Interdisciplinary Grant and Community Based Research Grant, foundation funding (McCarthey Foundation, Autism Speaks, Utah Autism Council), corporate funding (Google Community Grant) and private donations. Diener and Wright are currently applying for a Department of Defense grant.

Publications

Wright, C., Diener, M., Dunn, L. Wright, S.D. (2011). SketchUp: A technology tool to facilitate intergenerational family relationships for children with autism spectrum disorders, *Family and Consumer Sciences Research Journal*, 40, 2, 135-149.

Linnell, L., Diener, M., Wright, C. & Dunn, L. (2013). Sibling relationships in families with a child with autism spectrum disorders: Sisters and mothers perspectives. *Focus on Autism and Developmental Disabilities*. Revised and resubmitted.

D'Astous, V., Wright, S.D., Wright, C. A., & Diener, M. L. (2013). Grandparents of grandchildren with an autism spectrum disorder: Influences on engagement. *Journal of Intergenerational Relationships, 11*(2), 1-14.

Smith, K., Diener, M., & Wright. C. Assessing visual-spatial creativity in youth on the autism spectrum, under review, *Creativity Research Journal*.

Wright, S. D., D'Astous, V., Wright, C.A., Diener, M. L. Grandparents of grandchildren with autism spectrum disorders: Strengthening relationships through technology activities (2012). *International Journal of Aging and Human Development, 75*(2), 169-184.

Wright, S.D., Brooks, D. E., D'Astous, V., Grandin, T. (2013). The Challenge and promise of autism spectrum disorders in Adulthood and Aging: A systematic review of the literature (1990-2013). *Autism Insights*, 5, 21-3.