Esther L Zirbel, PhD

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SUMMARY

As a passionate educator, astrophysicist, teacher trainer, and devoted faculty coach, I design and lead professional development programs for educators, ensuring their students learn deeply, are better prepared for the 21st Century workforce, and are positioned to live significant lives.

HIGHLIGHTS

- Managed and supervised staff, improved performance, and provided vision and guidance
- Taught thousands of college students and hundreds of middle and high school students
- Trained hundreds of in-service K-12 teachers and coached hundreds of university professors
- Increased anonymous student evaluation of their professors by one letter grade over four years
- Envisioned and implemented professional development programs for teachers and professors
- Led curriculum design initiatives for departments and created innovative course sequences
- Infused cutting edge technologies into college classes and deepened student learning
- Led workshops on leadership for other faculty developers at national and international conferences

EDUCATION

| PhD (Tinsley Award) | Astrophysics | Yale University, USA |
|---------------------|--------------------------------|---|
| MBA | Business Administration | Simmons College, USA |
| MEd (Audit only) | Education Theory & Practice | Harvard, Tufts & Boston University, USA |
| MSc | Astrophysics | Sussex University, UK |
| BSc (Joint Honors) | Physics & Geophysics | University of Newcastle upon Tyne, UK |
| Abitur | High School Diploma | Alman Lisesi, Istanbul, Turkey |

LANGUAGES

English (fluent), German (native), Turkish (native), French (conversational), Spanish (basic)

CAREER HISTORY

| 2020 – present | CEO & Education Director | Learning Ledgers Foundation |
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| 2015 - 2020 | CEO & Coach for Professors | Educational Coaching Consultant |
| 2011 - 2014 | STEM Education Director | Brown University |
| 2005 - 2010 | Teacher Educator | Walden University |
| 2004 - 2009 | Associate Research Professor | Tufts University |
| 2003 - 2004 | Education Coordinator | Boston University |
| 1998 - 2002 | Assistant Professor in Astrophysics | City University of New York |
| 1995 - 1998 | Visiting Assistant Professor | Haverford College & Wellesley College |
| 1993 - 1995 | Postdoctoral Fellow | Space Telescope Science Institute (NASA) |

SELECT AWARDS

- Outstanding Leadership Award; Education 2.0: Uniting Changemakers to Revolutionize Education
- Top 100 Educational Visionaries Award; Global Forum for Educational Leadership (GFEL)
- Deans Merit Fellowship; Simmons College; (Full Tuition & Stipend)
- Tufts University Academic Technology Pioneer (ATP) Award
- NASA: "New York City Space Science Research Alliance" (PI Johnson)
- Hubble Space Telescope (HST): "Galactic Spectral Evolution" (PI Heap)
- HST observing project: "Cosmic Evolution of Galaxies in Groups" (PI Zirbel)
- HST archival project: "Black Holes and Radio Galaxies" (PI Baum)
- Yale University Fellowship; (Full Tuition, Stipend, Teaching & Research Assistantships)
- Science & Engineering Research Council Fellowship, UK; (Full Tuition & Stipend)
- University of Newcastle Undergraduate Scholarship, UK; (Full Tuition)
- Fulbright Scholarship & German Academic Exchange; (Full Tuition & Stipend)

BIOGRAPHY & PERSONAL STATEMENT

Biography: After graduating from Yale University with an award-winning PhD in astrophysics, I worked as a postdoctoral fellow, researching black holes in distant galaxies. My projects flew on the Hubble Space Telescope. During my faculty positions at Haverford College, Wellesley College, and the City University of New York I discovered a passion for teaching. I loved to see my students' eyes sparkle with excitement when they came to understand complex concepts. To learn how to teach more effectively and position myself as an educator, I attended over a dozen multiple-day professional development workshops and completed nine graduate level courses in education theory and practice at Harvard, Tufts, and Boston University. To leave a larger footprint, I focused on educating K-12 teachers. So, at Tufts University, in addition to teaching students and conducting research in science education, I collaborated on designing graduate level physics-andpedagogy curricula for in-service teachers. I taught and mentored these teachers. While advocating for STEM education in Massachusetts, I realized that K-12 and higher education institutions did not adequately prepare students for the demands of the 21st Century workforce. To bridge the gap between the academic and corporate worlds, I earned an MBA. I joined the School of Professional Studies at Brown University as STEM Education Director, worked with faculty on their curricula, reviewed evidence-based teaching strategies, and coached them in teaching and learning. Over four years, these efforts resulted in increasing the student evaluations of their instructors by almost one letter grade. As an independent consultant working at higher education institutions and nonprofit organizations, I established programs for educators. Examples included developing curricula at the Pro Kids Academy, designing the educational training program for Clean Ledgers LLC, launching the Center for Transformation in Teaching and Learning at Plymouth State University, and offering professional development workshops for faculty developers (professor educators). Recently, I was recognized by the Global Forum for Education and Learning as one of the Top 100 Educational Visionaries. Today, as CEO of Learning Ledgers my vision is to transform education by updating curricula to include 21st Century workforce skills and making learning more equitable, affordable, meaningful, and worthwhile for students.

Personal Statement: My own story explains why I am so passionate about education and leadership. I am a first-generation high school graduate, born to German parents who immigrated to Turkey during the post-world-war-II years. I was raised as the oldest daughter of four. We lived in poverty in downtown Istanbul and spoke primitive languages (with limited vocabularies and many f-words). Commodities were rare. Sometimes we even had to walk to the mosque to get water. My friend had an arranged marriage at the age of fourteen. The cultures at home and at school were quite different. I attended a selective German school where I was exposed to different cultures and traditions. When I turned thirteen, I realized that education was the key to a better future and could help me get out of poverty. I heard that there were stipends available for studying abroad. So, I went to German, French, and British embassies, spent hours in libraries, wrote numerous letters, and eventually landed a scholarship for a semester at a British boarding school. I had to fight to attend and finish high school and secretly applied to college. I left my family when I turned eighteen. I had to catch up in almost all disciplines, and study in a language I was still learning. It was a challenge, academically, personally, and emotionally. Upon graduating college with a Joint Honors degree, I worked in the oil industry and helped my sisters pay for their education. I went back to school and exceeded everybody's expectations when I earned an award for my PhD thesis at Yale University. I financed my education – high school through graduate school – with stipends and awards. I persevered and worked hard, and in the end, it was worth it. Now, I aspire to influence and support others to rise to their own challenges. To make a real impact, I create and offer transformational educational experiences to educators and their students - so they all can live full and significant lives.