

Article

Pretense or Belief: Creating Meaningful Scenarios and Simulations for Authentic Learning about Diverse Underserved Gifted Students

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Abstract: Understanding of the complexity of gifted students who present with an intersection of unique profiles of abilities and challenges, cultural, ethnic, gender and linguistic perspectives, learning experiences across contexts and personal expectations remains a challenge in identifying and serving diverse gifted students. Training teachers to recognize talent and high ability in these diverse populations remains a central problem in addressing issues of underrepresentation and providing a differentiated curriculum to meet their unique needs. The use of scenarios and simulations offers ways to observe, engage, interact and practice strategies in the post-pandemic online and hybrid learning modes, as demonstrated through a simulated classroom of diverse gifted learners. Presented here are ways to ensure that the scenarios and simulations can be designed to be authentic and present cases that approximate real students so that teachers can transcend the ‘pretense’ into ‘belief’ with real lessons and develop knowledge and skills to address the needs of underserved gifted students.

Keywords: underserved; gifted; authentic; scenarios; simulations



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1. Key Questions

Several questions need to be addressed when examining how to train teachers for the authentic recognition of underserved gifted students. How can teachers be trained to understand the full complexity of each of these unique diverse learners, especially those who are immigrants and English Language Learners (ELL)? What are the most effective methods to address stereotypes, myths and misconceptions about diverse students to bring about attitude changes and lead teachers to effectively identify and refer students for assessment for gifted services and programs? How can teachers be trained to develop services and curricula that are most meaningful, appropriate and challenging for these unique learners in relation to their individual profiles? What are the specific strategies that need to be included for students from low-income backgrounds and for English learners in the context of low-income schools (Title I)?

2. Introduction

As we emerge into a post-pandemic era, we can examine the lessons learned about ways to engage students in authentic learning and to train teachers. Teachers and students have been swept into crisis mode—a paradigm shift that resulted in acquiring skills for new learning management systems and applications as they strive to bridge online, hybrid, face-to-face and partially in-person modes of learning. In addition, this period generated an age of social criticism and activism directed towards a range of social issues prevalent in the media. Arguments are being debated about “going back” to pre-pandemic learning modes with in-person attendance versus the continuation of online learning and its benefits or drawbacks. Educators have argued that we are entering a new set of experiences in learning, in which the focus should be on the core objectives and mission of learning and then the selection of content that is both current and historical and choosing from the wide

range of possible learning opportunities that make the most meaning [1]. Central also to this is the issue of accessibility to and affordability of online learning options, especially in relation to increased levels of poverty and disparity in language and literacy skills.

Also emerging at the forefront of gifted education is the renewed focus on underserved gifted learners from diverse populations, with some districts in the United States questioning inequity and access and threatening the continuation of advanced and gifted programs. A report entitled ‘Access Denied: System Failure’ by Gentry and Colleagues [2] on the inequity in identification of gifted underserved students in the United States introduced the concept of ‘missingness’, stating:

“We define missingness as students who could/should have been identified, based on the percentages identified in each state on average (lower boundary) and at the higher rate of identification in Non-Title I schools (upper boundary). Missing students come from two sources: Schools in which students have no access to identification (schools that do not identify students) and schools in which some groups of students are under-identified.” [2]

What is also needed is a closer examination of the individual characteristics of these diverse students, whose profiles present a complex interplay of abilities, interests and motivations infused with cultural, national, multilingual, gender and socio-economic factors and unique personalities.

3. What Is ‘Real’ or ‘Authentic’ Learning?

The assumption exists that the most meaningful learning should be ‘hands-on’, ‘real-world’ or ‘experiential’—terms that often appear in popular media without an examination of the depth of thinking and inquiry that should be integrated, especially for gifted learners. John Dewey [3,4], with his pragmatic approach to learning, advocated for experiential learning: *“Give the pupils something to do, not something to learn; and the doing is of such a nature as to demand thinking; learning naturally results”*, but at the same time, he stressed the need for this to be inquiry- and problem-based: *“We only think when confronted with a problem”* and *“We do not learn from experience, we learn from reflecting on an experience”* [3]. During the pandemic, many online opportunities were developed with extensive virtual field trips from core museums and institutes with online activities and learning. In addition, a range of innovative approaches included a hybrid of actual and virtual learning, while place-based education developed with some schools and programs emerging that took place outside or in natural surroundings (many schools were encouraged to move outdoors during the pandemic). Leder [5] describes the curriculum and benefits to young children in a kindergarten school set in a forest in Denmark. However, as most teachers will attest, going on a field trip in itself does not necessarily result in automatic depth of learning—the way that observation is integrated into thinking, inquiry and problem-solving and results in student productivity is essential to develop meaning. Kaplan [6] has clarified the importance of prompts of depth and complexity within a learning experience to focus attention and clarify meaning in relation to both content and skill-related learning. Hence, in the use of scenarios and simulations, these prompts can be generated to steer student perceptions and understanding towards greater depth and complexity in learning, which is especially relevant for gifted students.

The question that arises, “What is real learning?”, is contemplated by the philosopher David Chalmers [7] with regard to the impact of virtual worlds, a topic explored in his book entitled *Reality+* that argues for the use of augmented, immersed and virtual learning to confirm notions of authentic learning. Galindo [1] clarifies the term ‘authentic’ in terms of a Constructivist approach, as stated on his website: *“Authentic Learning describes learning activities that are either carried out in real-world contexts, or have high transfer to a real-world setting”* (<https://ablconnect.harvard.edu/authentic-learning>; accessed on 10 December 2021). In addition, this learning should have personal relevance to connect to the worlds of the learner, as well as cultural relevance, and it should be student-centered to allow students to generate and explore situations themselves.

Teachers have striven to create a bridge into the ‘real world’ in the classroom by developing scenarios, often with the use of role play, to bring the learning ‘to life’ and engage students for deeper understanding. However, scenarios are only as good as their approximation to real conditions or cases and subject to a range of criteria. Many authors have described ways to develop meaningful scenarios and case studies. In the training of teachers in professional learning for differentiation in gifted education, Weber, Behrens and Boswell [8] have presented a wide range of case studies that examine multiple themes, topics and issues in gifted education. These relate to how to provide differentiation across different contexts for students with individual needs, aiming for authentic learning to improve appropriate placements, services and curricula for gifted students. How to bridge the ‘pretense’ through case studies with the reality of teaching in a diverse school with all its complexity remains a challenge.

4. Scenario-Based Learning

Several authors have clarified the ways that scenarios can be used for learning across a range of disciplines and subjects. Stewart [9] has developed a set of guidelines that clarify the process: a storyline is presented around a complex problem that students need to solve, then they provide a written or oral reflection and self-assessment on the process. This author presents beginning steps: identify the learning outcomes; decide on format; choose a topic; identify the trigger event or situation; peer review the scenario. Taking the use of case studies to another level, Scenario-Based Learning (SBL) is clarified in a curriculum by Sheppard and Schar [10] at the Design Education Lab at Stanford University in a four-module pedagogical process: the scenario or story description of the situation (case study) in which protagonists struggle with a real-world problem with information and instruction; a lab activity in teams (hands-on lab); team discussions to explore ways to complete the tasks (reflections and observations); a homework assignment in which students synthesize their learning. In an introduction to teaching using scenarios, Ada Lovelace Day [11] describes what should be included: an introduction with facts behind the scenario; desired learning outcomes; a fictional scenario; the situation, key questions, fictional stakeholders; the task set; activities; resources (this includes examples of how core issues such as gender can be presented in several possible scenarios).

5. ‘TeachLivE’ Technology—From Pretense to Belief

TeachLivE is a project developed through the University of Central Florida Center for Research in Education Simulation Technology, under the Synthetic Reality Lab (SREAL) at the Institute of Simulation and Training at UCF. As stated on their website:

“TLE TeachLivE™ is a mixed-reality classroom with simulated students that provides teachers the opportunity to develop their pedagogical practice in a safe environment without placing real students at risk. To our knowledge, this lab is currently the only one in the country using a mixed-reality environment to prepare or retrain pre-service and in-service teachers. The use of TLE TeachLivE™ Lab has also been instrumental in developing transition skills for students with significant disabilities, providing immediate feedback through bug-in-ear technology to pre-service teachers, developing discrete trial skills in pre-service and in-service teachers and preparing teachers in the use of STEM-related instructional strategies.” (<https://sites.google.com/view/teachlive/history>; accessed 10 July 2022)

Stemming from the use of virtual puppetry in teacher training in 2005, the UCF College of Education and College of Engineering and Computer Science initiated remote, virtual avatar-mediated, human-to-human communication initiated by ‘interactors’. Extensive research has since emerged with the development of augmented reality (AR) and the TeachLivE virtual environment of classrooms of avatars from 2010 that shows the wide range of applications of this technology to training teachers, especially those from exceptional education. Hayes and colleagues [12] examined the concept of “presence, engagement and ludus” in the Mixed Reality Environment (MRE) that included emerging technologies in

their research on exploring TLE TeachLivE on effective teacher training. The simulated classroom includes a ‘suspension of disbelief’ that goes beyond the ‘pretense’ of the scenario into presence and immersion. As they state:

“The TLE TeachLivE™ technology allows the virtual classroom to be populated with students who represent a range of ages, cultures, backgrounds, abilities and behaviors, enabling teachers to practice with students that reflect their target population.” [12]

These authors [12] expand on the role of playfulness without generating real consequences or negative impact in a classroom or school; teachers can explore a range of strategies, activities and communication with students as avatars in a safe environment, resulting in a pleasurable learning experience. While they are interacting with these avatars in the simulation, they go through a process that moves from playfulness or ‘pretense’ to a learning experience that ‘suspends their disbelief’. Teachers begin to relate to these case studies as real students and generalize their understandings and insights to their own students, gaining a depth of knowledge of diverse gifted students from other cultures and countries. This is dependent on the virtual students being presented with fidelity through extensive interactor training to portray the behavior, motivations and reactions of students they present. Research conducted by Dieker, Grillo, Ramlakhan and Eriksson [13] demonstrated the impact of using virtual and simulated environments in a science, technology, engineering and mathematics (STEM) summer camp of targeted diverse secondary science students from low socioeconomic backgrounds who were considered gifted with strong potential in these future STEM fields.

6. Demonstration of the Use of Scenarios in a Virtual Classroom: Project ELEVATE

Project ELEVATE, ‘English Language Excellence eVolving through Advanced Teacher Education’, a USDOE Jacob K. Javits Grant (2015–2021), set about addressing core questions and objectives, as stated on their website in the mission:

“The goal of PROJECT ELEVATE is to scale up the percentage of English Learners (ELL) and Economically Disadvantaged (ED or Title I) students who are identified for gifted services and to infuse the curriculum for developing intercultural excellence for diverse learners. Centered on best practices in gifted education, the project will present all students in treatment schools with alternative methods for identification of giftedness and ensure the foundation for developing excellence”. (<https://assistelevateucf.wixsite.com/giftedatucf/project-elevate>; accessed 10 July 2022)

Implemented in collaboration with a school district in Florida, the UCF Project ELEVATE team focused on the professional development of teachers across ten elementary (K–5 grades) and two middle (6–8 grades) schools (low-income Title I). The goal was to ‘elevate’ the knowledge and understanding of **all teachers** in treatment schools about the learning ability of students who are classified as English Language Learners (ELL) and Educationally Disadvantaged (ED) through professional development experiences to transform deficit views and overcome misconceptions, specifically related to language skills and challenges in low-income populations. The district used the Florida Department of Education (2013) [14] guidelines for determining eligibility for gifted services in addition to an extended matrix of multiple measures used to identify students from low-income populations and English Learners (termed Plan B), but this has not addressed the underrepresentation of diverse gifted learners in urban schools [15]. In Project ELEVATE, each school selected teams of teachers to receive specialized training after school and on weekends as **Teacher Leaders** across three treatments. Year 1 and 2 (2015–2017) included high-needs populations from the five lowest income level urban schools (Treatment 1). Year 3 and 4 (2018–2019) included low-income schools with high percentages of English Language Learners (Treatment 2). Year 5 and extension 6 (2020–2021) included two low-income middle schools with high percentages of ELL (Treatment 3).

As the recognition of high ability in learners who **need advanced challenges in curricula** plays such an important role in referral for assessment, identification and talent

development, this key objective took priority in training these teacher leaders in the treatment groups as well as the school-based training of all the teachers in all 12 schools (based on the Florida State and district guidelines for identification). This extensive program of specialized professional development included presentations and workshops from the UCF faculty team on ‘Diversity in Gifted Education’, ‘Schoolwide Enrichment and Acceleration’, ‘Innovative Methodology’ and ‘Multi-faceted Identification’ and also science, technology, engineering, art and math (STEAM). An important part of this training included the use of scenarios, case studies and virtual simulations in order to meet project objectives. To achieve this within each school, the UCF team trained **all teachers** in the treatment schools in differentiation, the Schoolwide Enrichment Model [16] and acceleration and how to identify gifted learners from marginalized populations. An innovative approach was designed using a virtual simulated classroom of gifted avatars developed with technology from the TeachLivE program.

7. Developing the Simulated Gifted Classroom

The UCF Project ELEVATE team collaborated with the UCF Center for Research in Education Simulation Technology (CREST) and the Synthetic Reality Lab (SREAL) at the Institute for Simulation and Training in 2015 to design a virtual interactive classroom to ‘bring to life’ five diverse gifted students from low-income backgrounds and different cultures, four of whom were immigrants with varying levels of English competence. In the design, real data stemming from gifted students were abstracted and provided by the district (anonymous, confidential) and formed the basis for generating case studies to represent five cultural backgrounds and five countries of origin (Mexico, Brazil, Ireland, South Africa and Korea), each with a range of diverse needs and levels of giftedness. These were further added to by an expansion of scenarios, which included an elaboration of the places, schools, cultures and countries where they originated and also specific lifestyles, interests, hobbies and levels of achievement and challenges faced when transitioning to schools in the USA. The students were also assigned personality profiles with unique motivations, behaviors, mannerisms, interests, concerns and cultural references. The avatars that had already been used previously in training for ELL were selected to represent four cases. A unique avatar was created using a real gifted student whose parents gave permission and supplied photographs and videos to draw and develop for the avatar from South Korea (an educational experience for this student, who found the experience both entertaining and stimulating). After the scenarios were created and the ‘interactors’ trained to present these avatars with fidelity, the scenarios were reviewed and tested and presented to individuals from these actual countries to check for authenticity to prevent misconceptions and stereotypes. Pilot studies were completed to ensure the relevance of the immersive experience with teams of teachers. The simulations took place in both the teacher leadership training for each teacher leader and within every school in grade-level teams. Stages of professional development included three forums that addressed: ‘Gifted versus High-Achiever’, ‘Underachievement and Overachievement’, and ‘Levels of Giftedness’. Stage 1 included a presentation of key issues; Stage 2 was the live interaction in the ‘ELEVATE Gifted Simulated Classroom’; Stage 3 included discussions and debates; Stage 4 was consensus building in each grade level team in response to questions; Stage 5 was a posting to the ‘ecampus’ (learning management) website and review of the responses of all other grade level teams (60 elementary school and 12 middle school grade level teams across 12 schools or 72 teams). This was followed by a workshop on ‘Designing Educational Plans and Differentiated Curricula for Individual Case Studies’.

The use of this discussion board allowed any school team to view the responses of the other teams and their reflections, and to develop their own perspectives and curriculum planning in relation to each of the interactions with these avatars. The use of consensus allows each participant to question their own assumptions about diverse students from different cultures and to observe the characteristics displayed in relation to levels of achievement and giftedness in the case studies. This process facilitates the transition from the

‘pretense’ or playfulness in the simulation to making this directly relevant to their actual students, a process known as “suspension of disbelief” [10], as stated above.

The website shows the original avatar case studies and includes details of the profiles and activities that can be used for training teachers (<https://assistelevateucf.wixsite.com/giftedatucf/project-elevate>; accessed 10 July 2022). To examine the impact of the simulation, a content analysis of the grade level team posts was analyzed in relation to core issues: misconceptions and stereotypes about diverse, underserved gifted students; levels of achievement and underachievement of the case studies; levels of giftedness; and the individual educational planning of services and a curriculum for each case study. The content analysis of the forum postings shows the move from ‘pretense’ to ‘presence’ to ‘belief’, whereby the case studies were discussed as if they were real students and awareness of their needs was developed.

One group wrote that:

“Eudora displays many indicators of an underachieving gifted student. She struggles to find the motivation to want to succeed in the classroom. She shares about the content not being ‘important for real life’. However, she does share her interest in plants that show she can be curious when it comes to certain topics. She also appears to be struggling with the transition to the American classroom. It’s possible she may have been viewed as highly intelligent in her native country, but not so much here. Therefore, it might be easier for her not to put herself out there for fear of confirming this lesser image of her.”

One group recognized Marta’s talents, sharing that:

“Marta shows her highly gifted abilities through her empathy for other countries and their experiences. She is very focused on communication and how her ability to communicate can be perceived. She has strong problem solving and interest to share how to solve issues through research and writing”.

Similarly, another group noted that:

“Ji-Ho also displays some of the characteristics of the profoundly gifted learner. He shares that he has skipped multiple grade levels and that the current course load still isn’t near as challenging for him. He also described his advanced musical ability which has developed much faster than his peers”.

8. Impact of Project ELEVATE

A mixed methods approach was used to determine the effectiveness of the professional development training. Subjects included groups of teacher leaders selected from the 12 treatment schools (29 in Treatment 1; 36 in Treatment 2; 11 in Treatment 3), with a control group of 100 teachers in matched schools in the district. In addition, teachers in all schools received training in the ELEVATE TeachLivE Gifted Simulated classroom in grade level teams (511 in Treatment 1; 462 in Treatment 2; 500 in Treatment 3). Research on the impact of this training showed the percentage growth in numbers of students being identified from these diverse populations who previously would have been ignored: overall gifted +/–30%; English Language Learner (ELL) gifted +/–148%; Economically Disadvantaged (ED) gifted +/–113% [17,18]. In addition, research on the impact of the professional learning of the teacher leaders across pre-post testing showed significant gains on measures of self-efficacy as a teacher of the gifted ($p = 0.003$) and their knowledge of the Culturally, Linguistically, Educationally Disadvantaged (CLEd) gifted ($p = 0.013$) amongst a range of measures. Project ELEVATE has demonstrated that specific training of teacher leaders in understanding the nature of giftedness through case studies of diverse learners and knowledge about a broadened approach to identifying giftedness has had a very significant impact on the numbers of students identified. These were students who were previously overlooked and did not receive appropriate services. This research and approach have demonstrated that the project has led to a closing of the gaps for underserved gifted learners in this district and state. In addition, a greater impact also took

place whereby English learners were recognized and identified using a matrix of multiple measures specifically developed for this population. The core objective of overcoming deficits in teacher awareness, knowledge and skills has been demonstrated in this project. As the simulation developed for this specific purpose included the use of case studies from within the parameters of this specific district, the use of these avatars and their abstracted profiles may not be generalized to other populations of diverse students. Further research is needed to determine the impact of this TeachLivE technology across districts and in other states or contexts.

9. Relevance for Training Teachers—Scripting Meaningful Scenarios

Beyond the use of this Mixed-Reality Environment (MRE), the case studies and this approach can still be used without the technology to address training and professional learning. The Project ELEVATE website contains each case study and scenario with individual profiles for exploration and discussion with corresponding questions and activities.

When scripting scenarios that include case studies of students who are immigrants and ELL, it is essential to use reviewers from their country of origin to ensure accuracy in presenting the unique education systems and expectations, the language accuracy and diversity, the cultural context and family expectations, and the type of curriculum used in that country. In addition, caution must be taken not to use a single case study to stereotype an entire country or culture and to ensure that the multiple perspectives are well-represented.

There are several ways to create meaningful scenarios, as suggested in the following strategies and guidelines. These can also be used to formulate criteria to determine the authenticity of the scenarios and simulations (Table 1).

Table 1. Criteria to determine ‘authentic’ scenarios and simulations.

Gather Data and Perspectives: Research actual cases of students and examine the complex interplay of factors in their profiles. Research the places related to their culture and linguistic heritage. Research literature, virtual field trips and resources that would provide a background of knowledge about their cultures. Read stories, diaries or letters written by someone with a similar background. Examine the assumptions about gender roles and family expectations. Learn some basic greetings and gestures from their linguistic background. Visit, virtually or in field, the actual places and spaces that impacted their knowledge base. Where possible, attend cultural events that would highlight lifestyles and celebrations. Examine their schools and educational systems with ways that they were assessed and how achievement is defined. Engage directly either in-person or online with individuals from their background to compare cultures, classrooms and learning experiences. Talk to teachers from their background who share their cultural and class expectations.
Develop a set of objectives and infuse issues Create a system to tabulate or chart the complex range of perspectives that infuse: Abilities—infuse the levels of giftedness. Achievements—infuse underachievers, selective consumers and high achievers. Personality—infuse socio-emotional issues. Gender roles and non-binary or heterosexual assumptions. Cultural and religious traditions and family. Language—the range of ELL levels or cultural linguistic perspectives and heritage.
Script the context and place: Choose a specific location—the town/city/region/climate—make it as real as possible to develop a virtual field trip. Choose a specific school and describe what it looks like, etc. Choose a specific curriculum and describe it—need for research on what already exists. Choose a place of residence. Develop a side-by-side comparison of the scenario context with the local school setting or school district.

Table 1. Cont.

Script the personal scenario: Examine a real profile and create a student with a similar set of abilities, achievements and motivations while maintaining complete confidentiality (abiding by FERPA rules). Choose a specific personality to distinguish ability from personality (you may want to consult personality inventories). Develop a range of their classwork—some writing examples, essays they may have written, even handwriting, their answers to introductory activities, etc. You can choose a specific cursive font for each case study. Ensure that some of the nuances of language use are infused (e.g., British English versus Standard American English). Complete an interest inventory for your case study. Infuse core issues, conflicts, incidents and challenges into the scenario that would generate a discussion on what may have impacted them. Craft an image—select a range of possible images of the case study from online photographs and then create a unique visual image—this could also be a drawing or graphic compilation. Script a possible interview: Set the stage—describe where or when this first meeting with the case will take place. Write some core questions that teachers often use to get to know their students. Present an activity to engage the case study—fictitious ice-breakers, etc. Script a meeting with family members or ask the case to describe their family and heritage.
Test the Scenario: Engage someone from the same background to review the script and the scenario. Check for errors, misconceptions, limited perspectives and stereotypes. Ask for corrections and contributions to make this more authentic. Ask for a review from a teacher from their background, culture or country. Field test the scenario in a forum with a group of teachers. Implement the training using the scenario: Use a collaborative lesson study approach [19] in which teachers work together to clarify core objectives before completing the training, and then reflect after the training. Invite the teachers to add to this checklist or develop a set of guidelines.

Adapted from Eriksson [20,21].

10. The Future—Infusing Simulation and Reality

We already live in a world in which what we think, do and achieve is monitored, documented and managed, often covertly. Many devices are already on our wrists for monitoring health, exercise and medical status or are implanted for living effectively, such as hearing implants and prosthetics. Research continues on how learning takes place, examining eye focus, levels of attention, motivations and behaviors—observations well-known and manipulated by social media. As this blending continues, so will the blending of what is considered ‘pretense’ merge with ‘belief’ to create new ways of knowing, experiencing and learning—a thrilling but intimidating prospect, where authenticity and altruism need to come together.

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References

- Galindo, J.H. Authentic Learning (Simulations, Lab, Field) Harvard Graduate School of Education. 2021. Available online: <https://ablconnect.harvard.edu/authentic-learning> (accessed on 10 December 2021).
- Gentry, M.; Gray, A.; Whiting, G.W.; Maeda, Y.; Pereira, N. *System Failure Access Denied. Gifted Education in the United States. Executive Summary*; Gifted Education Research & Resource Institute, Purdue University: West Lafayette, IN, USA, 2021. Available online: <https://www.education.purdue.edu/geri/new-publications/gifted-education-in-the-united-states/> (accessed on 1 July 2022).
- Dewey, J. *Experience and Education. Reprint Edition*; Free Press, Simon and Schuster: New York, NY, USA, 1997. Available online: <https://www.freepress.net> (accessed on 10 July 2022).
- Dewey, J. *Democracy and Education: An Introduction to the Philosophy of Education*; CreateSpace Independent Publishing Platform: Scotts Valley, CA., USA, 2013. Available online: <https://wwwcreatespace.com> (accessed on 10 July 2022).
- Leder, S. *Forest Kindergartens: A Multicultural Perspective. National Start Alliance*; North American Association for Environmental Education: Washington, DC, USA, 2019.
- Kaplan, S.N. Differentiating with Depth and Complexity. In *Fundamentals of Gifted Education: Considering Multiple Perspectives*; Callahan, C.M., Hertberg-Davis, H.L., Eds.; Routledge Taylor & Francis: New York, NY, USA, 2017.
- Chalmers, D.J. *Reality+: Virtual Worlds and the Problems of Philosophy*; W.W. Norton & Company: New York, NY, USA, 2022.
- Weber, C.; Behrens, W.; Boswell, C. *Differentiating Instruction for Gifted Learners; A Case Study Approach*; Routledge, Taylor & Francis: Oxfordshire, UK, 2016.
- Stewart, T.; Scenario Based Learning. Massey University, New Zealand. Available online: <https://www.massey.ac.nz/massey/fms/AVCAcademic/TeachingandLearningCentres/Scenario-based-learning.pdf> (accessed on 1 December 2021).
- Sheppard, S.; Schar, M. *Scenario-Based Learning (SBL)*; The Design Education Lab at Stanford University: Stanford, CA, USA, 2015. Available online: <https://del.stanford.edu/curricular-tools/scenario-based-learning> (accessed on 10 December 2021).
- Ada Lovelace Day Foundation. Introduction to Teaching Scenarios—Education Pack. 2021. Available online: <http://findingada.com/wp-content/uploads/2015/10/Ada-Lovelace-Day-Scenarios-Introduction.pdf> (accessed on 1 December 2021).
- Hayes, A.T.; Straub, C.L.; Dieker, L.; Hughes, C.E.; Hynes, M.C. Exploration of TLE TeachLivE and Effective Teacher Training. *Int. J. Gaming Comput. -Mediat. Simul.* **2013**, *5*, 20–33. [CrossRef]
- Dieker, L.; Grillo, K.; Ramlakhan, N.; Wallace, B.; Eriksson, G. The use of virtual and simulated teaching and learning environments: Inviting gifted students into science, technology, engineering, and mathematics careers (STEM) through summer partnerships. *Gift. Educ. Int.* **2012**, *28*, 96–102. [CrossRef]
- Florida Department of Education. Florida's Plan for K-12 Gifted Education. *Bureau of Curriculum and Instruction*. 2013. Available online: <https://www.fldoe.org/core/fileparse.php/7567/urlt/stategiftedplan.pdf> (accessed on 1 July 2022).
- Eriksson, G.I.; Lukens, J. *Shining a Light on a Talent Development for English Language Learners and Students Impacted by Poverty*; National Association for Gifted Children: Charlotte, NC, USA, 2017.
- Renzulli, J.S.; Reis, S.M. *The Schoolwide Enrichment Model: A Comprehensive Plan for Educational Excellence*; Creative Learning Press: Mansfield Center, CT, USA, 1985.
- Eriksson, G.I.; Capoverdi, T. *Transcend Traps into Triumphs for Underserved Title I, ELL, Immigrant Gifted Students*; National Association for Gifted Children 68th Annual Convention: Denver, CO, USA, 2021.
- Eriksson, G.I.; Bai, H.; Sanguiliano-Lonski, J. *Research Report and Impact of Project ELEVATE*, Jacob, K., Ed.; Javits Grant, United States Department of Education, #5206A150014 (2015–2021). Office of Research, University of Central Florida #105960. 2021. Unpublished work.
- Collet, V.C.; Keene, E.O. *Collaborative Lesson Study: ReVisioning Teacher Professional Development*; Teachers College Press: New York, NY, USA, 2019.
- Eriksson, G.I. Engaging Teachers in Professional Growth to Generate Excellence in Underserved Gifted through Advanced Teacher Education. In Proceedings of the World Conference on Gifted and Talented Children (WCGTC), Virtual Conference, 7–8 August 2021.
- Eriksson, G.I.; Ingraham, K.; Sanguiliano-Lonski, J. Learning Environments of the Future: Using Authentic and Virtual Reality to Examine Misconceptions about the Identification of Gifted Underserved Students and Design Curriculum for Diverse Gifted Students Using Real Case Studies. In Proceedings of the National Association for Gifted Children 67th Annual Convention, Virtual Conference, 3–5 November 2020.