



Annotated Bibliography on Analog Games and Learning

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Aarseth, Espen (2003). Playing research: Methodological approaches to game analysis.

Melbourne DAC, 1-7.

This article, written by Espen Aarseth of the University of Bergen, looks into methodological approaches to game analysis. The author discusses how the study of game aesthetics has risen in recent years and then promotes a methodology for the aesthetic study of games. The article discusses how and why to study games and gameplay, and introduces a typology of game research. Various methods of study are described, including study of game mechanics, observing others play and reading reviews, and playing games firsthand. The author introduces terms to describe different styles of game players, and also recounts his own experience playing a game in order to study it.

Ajibade, Y., & Ndububa, K. (2008). Effects of word games, culturally relevant songs, and stories on students' motivation in a Nigerian English language class. *TESL Canada Journal*, 25(2), 27-48.

This paper outlines a study that investigated how word games and culturally relevant song and stories could motivate and enhance the English performance of senior secondary school students in Nigeria. This article outlines the study in detail and then discusses its findings – revealing that the use of word games and culturally relevant instructional activities was highly beneficial to the English performance of students. This paper is relevant to English educators or those interested in using games or other related learning activities in classrooms. The study's findings are thoroughly presented.

Ansoms, A., & Geenan, S., (2012). Development Monopoly: A simulation game on poverty and inequality. *Simulation & Gaming*, 43(6), 853-862.

Written by An Ansoms, University Catholique de Louvain, and Sara Geenan, Universiteit Antwerpen, respectively, this article introduces the game *Development Monopoly* – a variation of the original *Monopoly* board game, in which players alter the rules so that they better reflect social stratification, poverty, and inequalities in the context of developing countries. The article includes a facilitator's guide for a simulation, a player's guide to the game, a debriefing, and variants. This resource is targeted at graduate and post graduate students, and other individuals who have an interest in development studies, social sciences, economics, and related disciplines. In addition, this article is relevant for those interested in using board games for learning. The article, though well written, is narrow in focus as it looks solely at *Development Monopoly* to enhance understanding of poverty and inequality.

Anyaegebu, R., Ting, W., & Li, Y. I. (2012). Serious game motivation in an EFL classroom in Chinese primary school. *The Turkish Online Journal of Educational Technology*, 11(1), 154-164.

This paper is a report on the findings of a qualitative PhD pilot research study on the integration of serious games – specifically *Mingoville* – to motivate the Chinese primary students in an EFL classrooms. The outlined study was carried out in two primary schools: the students of which are from low- and high-income families respectively in Jiangsu Province, PR, China. This paper explores the question of how serious games can be successfully integrated in ESL classrooms in order to motivate the Chinese primary school students. This resource is relevant to teachers of English as a Foreign Language who are interested in integrating serious games into their classrooms.

Barbara, J. (2014). Measuring user experience in board games. *International Journal of Gaming and Computer-Mediated Simulations*, 6(1), 64-79.

This article, written by Jonathan Barbara of Saint Martin's Institute of Higher Education, looks at measuring user experience in board games. The paper assesses the suitability of using a questionnaire, developed for digital games, for use on board games – thus providing a common measure of user experience between board and digital games. The author introduces a study which “aims to suggest an instrument that can reliably and validly measure user experience that can transcend game formats in order to assist in the design of transmedial games that fit within the target user experience” (65). The author reviews the current literature on the subject, and then defines user experience and discusses methods to measure user experience. Then, the author describes in detail the specifics of the study, including the research method, participants, instruments, ethical issues, and procedure. After this, the results of the study are discussed in various analyses. This article is relevant to educators and academics interested in the subject of games and learning – especially in the assessment of user experience. The article is well

organized and researched, and several graphs are provided to demonstrate the results of the research method. The scope of the article is thorough in that it looks at additional existing literature on the subject and possibilities for future research, and specific in that it provides excellent details related to the study of interest.

Barnard College. (2015). Reacting to the past: Pedagogical introduction. *Reacting to the Past*, 1-17.

Written by Barnard College, this article introduces the concept of using reacting games in education. The article describes the basic concept in detail, including its three phases (set-up, game, and post-mortem). This article also includes sections on the counterfactual history of reaction games, winning the games, course requirements and grading, roles, time commitment, and reacting preceptors. This resource is targeted at those interested in reacting games. It provides a thorough and useful introduction to the concept. An appendix of writing resources for reacting is also included.

Bell, R. C. (1979). *Board and table games from many civilizations*. New York, NY: Dover Publications.

Bell provides an excellent encyclopedia of games from around the world. The book delivers short descriptions of games from various countries and time periods, even including helpful diagrams to help explain the games themselves. Bell includes biographies of the creators of some of the most famous ancient games, such as backgammon and chess. While the work fails to provide for a wide audience, it would be helpful to those who are interested in rare and ancient games.

Chapter Titles:

- Race Games

- War Games
- Games of Position
- Mancala Games
- Dice Games
- Domino Games
- Making Boards and Pieces

Berland, M., & Lee, V. (2011). Collaborative strategic board games as a site for distributed computational thinking. *International Journal of Game-Based Learning*, 1(2), 65-81.

Written by Matthew Berland of the University of Texas at San Antonio and Victor Lee of Utah State University, this article looks at collaborative strategic board games and how the games benefit distributed computational thinking. Specifically, this article uses the collaborative board game “Pandemic” as an example for discussion and analysis. The authors begin by describing “Pandemic,” its basic rules, and how the game aids in computational thinking. To do this, the authors distill computational thinking into a few categories – conditional logic, algorithm building, debugging, simulation, and distributed computation. Using these categories, the paper then analyzes three complete runs of *Pandemic*, played by three different groups of students. After analyzing the results of these tests, the authors discuss the outcomes and make the statement that “many of these contemporary strategic board games could represent an important, and as-yet under-considered foundation from which designers can intentionally develop computational thinking” (p. 300). This resource is useful and relevant for educators and others interested in using games for learning. This article is well written and thoroughly

researched, and the arguments and analyses are clear and easy to follow. Many examples and images are included, which serve to strengthen the quality of the arguments.

Bird, K. (2014). Gamification trends in education: Level-up to a college degree. *Rasmussen College*. Retrieved from <http://www.rasmussen.edu/student-life/blogs/college-life/gamification-trends-education-level-up-college-degree/>

The author of this article began by defining gamification and briefly discussing how the term has become widely used online and in classrooms. Bird goes on to discuss trends in gamification, including using gaming terms such as points, badges, and progress notifications in designing online classrooms and course management systems. Finally, the article concludes by stating that gamification is ideal for those fascinated with the idea of strategizing and earning points to level up to their college degree. This resource is targeted at college students and educators interested in learning about gamification and education. While concise, the article does provide a clear introduction of the concept and its use in online college courses.

Birnbaum, R. (1982). Games and simulations in higher education. *Simulations & Games*, 13(1), 3-11.

Robert Birnbaum of the Columbia University Teachers College wrote this article on games and simulations in higher education. In this article, the authors introduces several approaches for higher education as a profession and field of study – on the job training, internships, and gaming. According to the article, games and simulations, while testified as valuable in professional education, are rarely used in instructional programs. The article then introduces existing game and simulations resources that can be used by faculty in higher education programs. The author concludes by stating that though

according to surveys few faculty in higher education programs are using games as teaching tools, “we may look for profound changes in the future in the way instruction is carried on in higher education programs” (p. 11). This resource is targeted at those involved in higher education. The article is also useful to those interested in the use of games for learning. Many resources for the subject are provided.

Bowman, S. L. (2010). *The functions of role-playing games: How participants create community, solve problems and explore identity*. Jefferson, NC: McFarland & Co.

Sarah Bowman demonstrates the real-world applications of role-playing games through numerous examples and an unobtrusive use of theory in *The Functions of Role-Playing Games*. Bowman attacks the misconception that role-playing is a psychologically damaging activity that can harm the players’ ability to distinguish between reality and fantasy. Bowman also works to prove the usefulness of role-play throughout the work and does so with a surprisingly pleasant flow. *The Functions of Role-Playing Games* furnishes a surprising level of theory, be it educational or psychological, without turning into an abstract work. The examples not only demonstrate the usefulness of role-playing, but also show the wide variety of purposes that role-playing serves. Many facets of Western culture, from the medical profession to the United States military, use role-playing to help them train or even identify PTSD. *The Functions of Role-Playing Games* is an excellent book for any educator who is interested in using role-playing in the classroom or any individual who wants to learn more about role-play in general.

Chapter Titles:

- Historical Evolution and Cultural Permutations
- RolePlaying in Communal Contexts

- Interactional Dynamics in RolePlaying Games
- RolePlaying as Scenario Building and Problem Solving
- Tactical and Social Problem Solving
- RolePlaying as Alteration of Identity
- Character Evolution and Types of Identity Alteration

Brathwaite, B., & Schreiber, I., (2008). *Challenges for game designers*. Newton Centre, MA: Charles River Media.

Brenda Brathwaite and Ian Schreiber present an in-depth exploration of analog game design for game designers both in the digital and the analog gaming sphere. They break down the complex process of gaming design into easily digested, logically organized sections. They separate the core of the game from its good and necessary inferences. The book explains that resource development is the core of the game, as opposed to building or outperforming one's opponents (which both serve as secondary functions within the game). A descriptive list of key terms is provided within the work; it even includes differing methodologies for generating ideas for the games themselves. It even includes exercises for both analog game designers and digital designers to help stimulate creativity and vision for the reader. Additionally, the book focuses on the types of stories told through games and the formats that are often used to tell them to the audience through gameplay. *Challenges for Game Designers* provides an excellent foundation for anyone studying games or actually designing games themselves.

Chapter Titles:

- The Basics
- Game Design Atoms

- Puzzle Design
- Converting Digital to Physical
- Elements of Chance
- Elements of “Strategic” Skill
- Elements of “Twitch” Skill
- Chance and Skill: Finding a Balance
- What Is Intellectual Property?
- Creating Sequels
- Targeting a Market
- Learning an Unfamiliar Genre
- Designing a Game to Tell a Story
- Adding and Subtracting Mechanics
- “But Make It Multiplayer”
- Creating a User Interface
- Games as Art
- Games as a Teaching Tool
- Serious Games
- Casual Games
- Social Networks and Games

Burke, B. (2014). *Gamify: How gamification motivates people to do extraordinary things*.

Brookline, MA: Bibliomotion.

The author provides a technical manual for gamification, primarily within the business world. Burke explains that gamification is all about motivation, which has three elements,

autonomy, mastery, and purpose. He expounds “[p]eople are motivated by maintaining a sense of autonomy, progressing, toward mastery, and engaging with a purpose larger than themselves” (24). *Gamify* intends to ground itself in reality and highlight the best practices in gamification through precise case studies. Burke begins by answering common business-based questions about gamification and its uses. The book is divided into two sections. In the first, concepts as well as uses of gamification are carefully addressed, and in the second, Burke provides step-by-step instruction for people who are interested in leveraging gamification within their various organizations. *Gamify* consistently references real-life case studies to bolster its arguments throughout the body of the work. It is not written for the general audience; however, for those in the business or educational spheres it can be an excellent handbook for utilizing gamification within their own organization.

Chapter Titles:

- Motivation: The Gamification Endgame
- Give Meaning to Players
- Changing Behavior One Step at a Time
- Using Gamification to Develop Skills
- Using Gamification to Drive Innovation
- Player-Centric Design
- Designing a Gamified Solution
- Common Design Pitfalls
- Managing for Success
- Gamification 2020: What the Future Holds

Butler, K. L., & Mead, A. S. (2011). Enhancing educational gaming with smart classroom technology: Playing the “game of health.” *Journal of Technology Integration in the Classroom*, 4(2), 17-22.

This article is written by Karen Butler and Antonia Mead, professors of health education at Johnson C. Smith University. The article describes how the board game *The Game of Health* can be used as an educational classroom activity using an interactive whiteboard. This article briefly describes the objectives of the game, procedures for creating the game, and assessment technique. This resource is targeted at educators, primarily in the field of health education, who are interested in using technology enhanced games in their classes. This article only briefly introduces the game, its value, and how to create it.

By, T. (2012). Formalizing game-play. *Simulation & Gaming*, 43(2), 157-187.

Tomas By, a computer science researcher, is the author of this article on formalizing gameplay in wargames. The author begins by describing the term *wargaming*, introducing both analog and computer wargames. Next, the author discusses the notion of gameplay and the importance of rules and procedures. Formalization is then discussed, as well as the way in which written rules in physical wargames can be compared with computer coding in computer wargames. The author goes on to discuss external representation of gameplay, internal representation of gameplay, and future directions on the subject of formalizing gameplay. The article concludes with the statement that “a formal language for describing the game-play makes the game definition an entity that is separate from any particular tools, which means that games can survive through generations of software products” (p. 177). This resource is relevant to those interested in gaming and formalization. While the article does not go into discussion on the subject

of games and learning, it does contain valuable information about the formal language for describing gameplay, which could be useful to players and educators alike. The article is clearly written and contains a thorough list of references with an appendix.

Caponetto, I., Earp, J., & Ott, M. (2014, January). Gamification and education: A literature review. *Proceedings of the European Conference on Games Based Learning, 1*, 50-57.

Caponetto, Earp, and Ott, provide an excellent review of the literature of gamification at the end of 2014. Primarily, the article focuses on the emergence of gamification literature and what this signals about educators today. The authors explain that gamification is a rising phenomenon with a strong empirical backing from across the various spheres of education. Gamification is being used to help understand complex issues as well as the more simplistic problems that can be tackled by games in education. It is also being used to help supplant many forms of homework and to help reduce the number of missed assignments. The authors do not provide interpretation of the facts, but rely upon the simple method of distilling the information for the reader in a readable fashion. The article is a very helpful overview of the types of literature that address gamification as well as a descriptive summary of the uses of gamification around the globe.

Carreiro, J. L., & Kapitulik, B. P. (2010). Budgets, board games, and make believe: The challenge of teaching social class inequality with non-traditional students. *American Sociologist, 41*(3), 232-248.

Joshua Carreiro and Brian Kapitulik, professors of sociology at the University of Massachusetts and Quinsigamond Community College respectively, are the authors of this article about teaching social class inequality with non-traditional students. After discussing the growing non-traditional student population in undergraduate programs, the

authors analyze 23 articles from the years 1987- 2007, all from the academic journal *Teaching Sociology*. These articles look at various classroom strategies in which educators attempt to teach their students about social class inequality by “looking down”. Three broad categories of education methods are analyzed – “(1) articles that suggest in-class simulations of economic disadvantage, (2) articles that encourage experiential learning by requiring students to simulate economic disadvantage in the outside world, and (3) articles that emphasize experiential learning by bringing the outside world into the classroom” (p. 233). The authors argue that while each of these approaches has potential merits, these merits do not justify the dangers, which include alienating those students who are themselves economically disadvantaged, causing those students to resent more advantaged students, and trivializing hardships of less advantaged students. The authors conclude that using the educational methods that assume privileged, traditional student bodies are dangerous in that they can exclude, offend, and marginalize non-traditional and less privileged students. The authors recommend that as a solution, educators should poll their students anonymously to determine social background and incorporate readings about non-traditional and less advantaged students into their curriculums in order to encourage discussion based on the students’ own experiences. This resource is useful and relevant for any educators in undergraduate education who wish to teach social class inequality, especially for those with more diverse student bodies. While this resource is well written, well researched, and thorough in both scope and statistical references, it focuses more on the problems with the proposed teaching methods than it does in developing new ones. Though the title suggests otherwise, the

subject of board games in learning is only briefly discussed, and used as one of the many examples of how educators teach students about social inequality.

Cessario, L. (1987). Utilization of board gaming for conceptual models of nursing. *Journal of Nursing Education*, 26(4), 167-169.

Written by Lynda Cessario, this article discusses utilizing board gaming for conceptual models of nursing. The relation between reinforcement and motivation is discussed, and board games are introduced as a resource for reinforcing subject matter while also motivating students to learn. Advantages and disadvantages to gaming are identified, and criteria for developing educational games are introduced. The author then introduces a particular board game entitled *Cessario's Board Game*, which was developed for learning of conceptual models of nursing. The overall game instructions and mechanics are described, as is the experience of field-testing the game with graduate students. This article is targeted specifically at nursing educators, but it is relevant to anyone interested in the relationship between board games and learning. The article provides an adept introduction to the topic of using board games for conceptual models of nursing.

Champion, E. (2015). Role-playing and rituals for cultural heritage-oriented games. *Authors & Digital Research Association DiGRA*, 1-16.

This article, written by Erik Champion from the School of Media Culture and Creative Arts at Curtin University, includes information on how computer role-playing games and virtual online worlds appear to simulate different cultures. The author contends that the meaning behind worlds, rituals, and roles are not fully explored in these digital games and virtual worlds, and that more work needs to be done to create rituals that are more moving, role enrichment, and worldliness. Three aspects of virtual worlds that may

enhance role-playing are also introduced – freedom of choice and individuality, social jockeying of position as roles are socially defined, and the ability to act as curators of tradition. Various essential aspects of “world” are discussed, including environmental aspects, social aspects, and cultural aspects. This resource is targeted as game designers and scholars, especially those interested and involved with role-playing games and virtual worlds. The article is well organized and thoroughly researched.

Collier, C. (1996). Creating games for emerging English speakers: Language & content reinforcement activities. (ED421878). Retrieved from <http://eric.ed.gov/?id=ED421878>

This author discusses the use of games, role-playing, and simulation to teach ESL learners, particularly to reinforce new knowledge or expand emerging knowledge and skills. An introductory section looks at game theory and the ways in which it can inform the construction of classroom activities. Distinctions are made between games, role-playing, and simulation, their purposes, and the way in which they can influence individual learner behavior and classroom interaction. A set of card games designed to supplement content lessons at any grade level are then presented. The three basic games use a set of specially prepared language development card decks designed for bilingual and ESL instruction, and each deck is intended to reinforce or help assess specific language learning concepts or content. Instructions for preparing the card decks are given, and classroom uses of the games for teaching and assessment are discussed briefly. The three games are then described in detail, including card deck composition, learner grouping, the object of the game, dealing procedures, and game strategy. Sample cards are appended. This resources is relevant to ESL students or teachers who are interested

in using games to facilitate learning. The paper is well written and researched, and many examples and additional resources are provided.

Collins, K. M., & Griess, C. J. (2011). It's all in the game: designing and playing board games to foster communication and social skills. *Young Children*, 66(2), 12-19.

Kathleen Collins, Assistant Professor of Literacy, Language and Culture at Pennsylvania State University and Carolyn Griess, Instructor in the College of Education at Pennsylvania State University, wrote this article. This article looks at how board games can be designed and used to foster communication and social skills in young children. The authors explore children's modes of communication and look at ways to teach children about games and through games. Specifically, the process of creating a game called *Rainforestland* is discussed, a game that children designed and constructed (with supervision), using books about the rainforest. The authors conclude that the children in the classroom who created the game brought diverse linguistic and cultural experiences to the classroom. The process of creating the game provided a context for positive social interactions, offered children a variety of languages, engaged children in meaningful reading, and provided authentic opportunities for conversations. This article is particularly relevant for educators of young children who would like to use board games – and creating board games as a group – to teach their class. The article is creatively written, thoroughly researched, and incorporates many pictures of the game-making process.

Cooper, D. F. (1980). Board wargames for decision making research. *European Journal of Operational Research*, 5(1), 36-41.

Dale Cooper of the University of Southampton's Department of Accounting and Management Economics and Jonathen Klein of the University of London's Department of Mathematics wrote this article. The authors discuss how war games can be used to research decision-making. The aim of the authors' research is to test models of the decision maker, and this article discusses how board wargames can be used for this purpose. The article looks at experiments with a tactical wargame (*Panzer Leader*), requirements for a research game, requirements for methodology, and The Organizational Control Game, a game that was designed by the authors to satisfy their research requirements. The resource is directed at those interested in research methods for investigating decision making, especially through board games. The article is well researched and contains a variety of useful examples and studies.

Copeland, T., Henderson, B., Mayer, B., & Nicholson, S. (2013). Three different paths for tabletop gaming in school libraries. *Tabletop Gaming* 61(4), 825-835.

In this article, three school library staff members explore how they have used tabletop games in different school library settings. Teresa Copeland (Tesseract School) explores how tabletop and role-playing games have been integrated into the curriculum across a wide variety of grade levels. Brenda Henderson from Trinity High School Learning Resources Centre discusses how a board game club has made a difference in a high school library in the UK. Brian Mayer from the School Library System at Genesee Valley Educational Partnership supports multiple school libraries in finding matches between the curriculum and authentic games and runs game design workshops. This resource is targeted at those interested in incorporating tabletop gaming in school libraries. Each perspective and approach is well written and valuable to the topic.

Costikyan, G. (2012). *Uncertainty in games*. Cambridge, MA: MIT Press.

Greg Costikyan delves in the realm of theory to examine games in their abstract forms. He incorporates every type of game from a digital first-person shooter and tabletop games such as *Diplomacy*, to the simple games such as Rock-Paper-Scissors. Costikyan focuses on the benefits of uncertainty within game play stating that games without it tend to become dull. The book uses a cross-section of games from the various types, such as digital and analogue, as well as the different flavors of games such as multiplayer and solitaire games. *Uncertainty in games* fails to provide a flowing narrative to engage the average reader. However, for those studying and designing games, Costikyan's work provides a concise expose of the theoretical aspects of uncertainty in gaming.

Chapter Titles:

- Introduction
- Games and Culture
- Uncertainty
- Analyzing Games
- Sources of Uncertainty
- Game Design Considerations
- Conclusion

Costikyan, G., & Davidson, D. (2011). *Tabletop: Analog game design*. Pittsburgh, PA: ETC Press.

Tabletop illustrates the highpoints and the low points of game design in a book that flows more like a book than an instructional manual of game design. While it does not provide many resources for the budding game designer, the work focuses on the biggest issues

that face game designers as well as a breakdown of the terminology of the field. The authors examine several games that serve as case studies to highlight the issues at hand. *Tabletop* perhaps is best described as a light theoretical book that allows for more tangible access to theories of game design. *Tabletop* serves readers who wish to better understand the different types of games and the issues their designers faced in the early stages of development.

Chapter Titles:

- Introduction
- Designing Tabletop Games
- Game Analyses
- The Study of Tabletop Games

Cover, J. G. (2010). *The creation of narrative in tabletop role-playing games*. Jefferson, NC: McFarland & Co.

Jennifer Cover delves into deep into the creation of narrative in role-playing games, painting a mental image for the reader of the act of playing role-playing games, much in the way a game master does in the games themselves. In a very academic way, but without the connotations of stilted language, Cover explains the technical aspects of “narrativity” within RPGs. She provides charts to help illustrate her points when the work descends into the more technical elements of the subject. Her use of imagery from her own experiences is riveting at times as she describes the imaginary world of gameplay. *The Creation of Narrative in Tabletop Role-Playing Games* is an excellent work for any English educators, and is created primarily for them. However, it is an interesting read for virtually any other educator as well.

Chapter Titles:

- Early Models of Interactive Narrative
- RolePlaying Game Genres
- A Transmedia Tale
- The Reconciliation of Narrative and Game
- Frames of Narrativity in the TRPG
- Immersion in the TRPG
- Levels of Authorship
- The Culture of TRPG Fans
- Conclusions Definitions Implications and Limitations

Daubert, A., Hornstein, S., & Tincani, M. (2014). Effects of a modified power card strategy on turn taking and social commenting of children with autism spectrum disorder playing board games. *Journal of Developmental and Physical Disabilities, 27*(1), 93-110.

Written by Angel Daubert, Shana Hornstein, and Matt Tincani of Temple University, this article discusses the effects of a modified power card strategy on turn taking and social commenting of children with autism spectrum disorder (ASD) playing board games. The authors describe the power card strategy as “a strength-based intervention that uses a visual aid based on the child’s special interest to increase appropriate social initiations and other prosocial behaviors” (p. 94). This paper looks in particular at a study by Keeling, in which this strategy was used to teach sportsmanship skills to a child with ASD. The authors discuss the research method in detail and then analyze the results of the study through graphs. Finally, the authors mention limitations of the study and discuss future research possibilities, which are needed to confirm the benefits of the

power card strategy. This resource is limited in its target audience, as it is geared to those dealing with or studying ASD. However, the article is well written and researched, and would be very beneficially to those interested in the subject. This article is informed by extensive research and sources.

Davidson, D. (Ed.). (2008). *Beyond fun*. Pittsburgh, PA: ETC Press.

Drew Davidson edited this book, with chapters written by various authors. The book looks at ways games, simulations, and interactive experiences can be used within learning contexts. The articles are not separate, but are written to work together as a whole. It is the intention of the authors that “this text will serve as the basis of many more discussions across conference panels, online forums and interactive media that in turn will engender more special collaborative issues and texts” (p. 4). Topics of chapters include educational gaming, visual literacy and learning, video games and pedagogy, and educational software development. This resource is targeted at those interested in using simulations and digital games in learning. While the topic of simulation, digital games, and interactive experiences and their uses for learning are discussed in depth, this book does not contain information on analog or board games.

DeKoven, B. (2014). *A playful path*. Pittsburgh, PA: ETC Press.

Written by Bernard DeKoven, *The Playful Path* is a collection of tools, narratives, and theories to support people in their efforts to come out and play – to validate and develop playfulness. This book has four primary sections – the first describes playfulness as an approach to the human experience, the second focuses on games as vehicles for practicing and understanding the art of playfulness, the third is about the experience of play, and the final section explores the nature of fun. This resource is not targeted at a

specific audience – rather, it is written for everyone, with the purpose of teaching them how to incorporate play and fun into their everyday lives. While the book is not directly relevant to the subject of games and learning, it could be useful in that it discusses how to bring games into everyday life.

Depigny, S., & Michelin, Y. (2007). Shrub battle: Understanding the making of landscape. *Simulation & Gaming*, 38(2), 263-277.

Sylvain Depigny a PhD student interested in environmental modeling and computing, and Yves Michelin, a professor of agronomy applied to environment and landscape planning wrote this article. In this article, the authors introduce the board game *Shrub Battle*, a game which helps tutors make future rural planners aware of the complex relationships between landscape dynamics and agricultural practices. The article begins by discussing why games are effective tools in teaching these skills, and then begins to describe *Shrub Battle*'s rules and various features. The authors outline a *Shrub Battle* game session, which includes a preparatory phase, the game phase, and a debriefing. Finally, both quantitative and qualitative results are given and discussed. The authors conclude that “educational games are acknowledged as providing a useful means of addressing complex multidisciplinary issues” and “*Shrub Battle* should be included in this category of games” as it has proved a very useful tool in their “educational approach to the topic of interactional relationships between agricultural activities and landscape changes in rural areas” (p. 275).

Dice Tower. (2016). Retrieved from

<https://www.youtube.com/channel/UCiwBbXQlljGjKtKhcdMliRA>

Dice Tower is a board game audio and video review web series that is dedicated to promoting analog games. The web series provides descriptions of game play, items that are included in the box, as well as a conclusion about whether or not they recommend the game for purchase. Ultimately, the Dice Tower series provides a detailed view of different board games for people who are unsure about purchasing any given board game.

Dikkers, S., Zimmerman, E., Squire, K., & Steinkuehler, C. (2010). *Real-time research: Improvisational game scholarship*. Pittsburgh, PA: ETC Press.

Sean Dikkers, Eric Zimmerman, Kurt Squire, & Constance Steinkuehler are the editors of this book on improvisational games scholarship. This book includes the work of numerous authors that “care enough about their field to find time to play at it and share it” (p. 6). The book includes an introduction describing the nature and purpose of the book and multiple chapters written by various authors on the subject of play and game scholarship. This creatively written resource is relevant to anyone interested in game research and scholarship.

Dirksen, J. (2012). *Design for how people learn*. Berkeley, CA: New Riders.

Design for how people learn is a good work that tries to answer the questions people have been asking about how people learn. It provides numerous illustrations, graphs, and color palettes. It is extremely easy to follow, replete with pictures and graphs. The lessons contained within are presented in a simple form to communicate to any audience.

Although it lacks technical terms that can be communicated with professionals in the field, it presents the fundamentals in easy-to-remember ways. It does not focus on any one area, but instead, attempts to cover every major facet of human learning. Julie Dirksen gives many examples of motivational tools that she recommends in various

situations. While the book is not explicitly academic, it communicates some scholarly ideas in extremely easy-to-understand ways, and provides a certain level of brevity when dealing with dry subject material.

Chapter Titles:

- Where Do We Start?
- Who Are Your Learners?
- What's the Goal?
- How Do We Remember?
- How Do You Get Their Attention?
- Design for Knowledge
- Design for Skills
- Design for Motivation
- Design for Environment
- Conclusion

Eisenack, K. (2012). A climate change board game for interdisciplinary communication and education. *Simulation & Gaming*, 44(2-3), 328-348.

Klaus Eisenack is the author of this article on a climate change board game for interdisciplinary communication and education. The author describes climate change as “an interdisciplinary challenge for society” (p. 329). Particularly, this article introduces the board game *Keep Cool* and how it can be used to help with interdisciplinary communication and collaboration. The article describes the rules, game design, and learning possibilities of *Keep Cool*, focusing especially on how it can be used as a communication tool to bring various disciplines together. After discussing the game's

educational use, the author concludes with an evaluation of the game based on numerous game sessions. According to the author, “the current ready-to-play version has already contributed to teaching and communicating climate change” by providing “a common ground for interdisciplinary collaboration and for transdisciplinary activities” (p. 345). This article is relevant for those interested in the use of board games for education, and also those seeking to connect different disciplines. The author is thorough in his research, and the article is well written. While *Keep Cool* is the only example presented of a board game that can contribute to interdisciplinary communication, the game is well used in the article to illustrate the author’s main points.

Elias, G., Garfield, R., Zimmerman, E., Gutschera, K., & Whitley, P. (2012). *Characteristics of games*. Cambridge, MA: MIT Press.

George Elias, in *Characteristics of Games*, focuses on “issues intrinsic to the games themselves,” as opposed to writing about the process of game design that has received countless treatments across the globe. *Characteristics of Games* gives an overview of games in general. It provides an interesting viewpoint for all readers, not merely those who are designing their own games. Additionally, the good flow in *Characteristics of Games* allows the reader to continue through the book without being bogged down in technical jargon or boring anecdotes. *Characteristics of Games* also provides interesting analysis that makes in extremely useful for educators in an accessible way. Although it lacks a central thesis, the work is extremely informative. *Characteristics of Games* is an excellent read for educators and the average readers alike.

Chapter Titles:

- Basics

- Multiplayer Games
- Infrastructure
- Games as Systems
- Indeterminacy
- Player Effort
- Superstructure
- Appendixes

Enfield, J., Myers, R. D., Lara, M., & Frick, T. W., (2012). Innovation diffusion: Assessment of strategies within the diffusion simulation game. *Simulation & Gaming, 43*(2), 188-214.

Jacob Enfield, Rodney D. Myers, Miguel Lara, and Theodore Frick – all from Indiana University-- wrote this article. This article looks at a study in which the authors investigated the *Diffusion Simulation Game* to assess the consistency of strategies effective in the game with those implied to be effective by the diffusion of innovations theory on which the game is based. The article begins by discussing how the research on the use of simulations and games for learning has been increasing. The authors then look at a review of the literature on the theory of diffusion and fidelity of simulations before providing a detailed description of the *Diffusion Simulation Game* and various strategies associated with it. The article goes on to describe the research method and data collection process, analysis and results of the study, and further discussion. Limitations of the study and implications for future research are also discussed. This article is useful and relevant to any educators interested in using games to promote learning. The article is well written and well researched, and multiple related tables and figures are also provided. Not only do the authors successfully describe the *Diffusion Simulation Game* study and its results,

they also tie it into the larger theme of games and learning and other studies on the subject.

Esmâ B. K., İşeri, Ş., & Vurkaya, G. (2010). A board game about space and solar system for primary school students. *Turkish Online Journal of Educational Technology*, 9(2), 1-13.

Esmâ Bulus, Şebnem İşeri, and Gurbet Vurkaya – all from Kocaeli University’s Natural Sciences Institute Elementary Science Education Programme—wrote this article. In this article, the authors begin by defining the term “game” and describing why games are important to physical, mental, and emotional development. The authors then proceed to the main subject of the article, which is a summary of a study which aimed to design a game that could be used as an evaluative part of education. The authors believe this study to be especially important, as there are few research projects on the topic. They also believe that “if the benefits of using games as activities in education (are) take(n) into account, it will be realized the requirement of making studies about increasing the frequency of using games” (p. 1). Finally, the article proceeds to outline the process of the chosen study, highlighting methodology, information about the game, methods of data gathering and analysis methods, and opinions from teachers and students. The game *Space Hunters* is used for this study – a five-player Turkish board game that evaluates students’ knowledge of celestial objects in space and understanding of their attributes. The article concludes with a brief summary of the results of the study, emphasizing the positive experiences of students and teachers in using this game for evaluation. This resource is useful for anyone involved in education who is interested in using analog games as an evaluative part of learning. This article serves to reinforce the idea that games are a valuable education tool, using the given study as solid evidence for this idea.

While the article does contain numerous grammatical errors, the research of the article is thorough and the study is well presented and analyzed.

Ewalt, D. M. (2013). *Of dice and men: The story of Dungeons & Dragons and the people who play it*. New York, NY: Scribner.

David Ewalt attempts to demythologize the infamous role-playing game Dungeons and Dragons and the people who play the game. Ewalt writes in a witty and humorous manner. Ewalt takes great pains to help the audience understand Dungeons and Dragons (D&D); but more importantly, he reveals the world of the D&D player as an exciting fantasy world of imagination and creativity. While *Of Dice and Men* is incredibly informative, the writing style makes the reader feel as though the book is more of a pleasurable read and not one that was primarily published for education. The authenticity is relentless throughout *Of Dice and Men*, including the occasional profane response by one of the various people Ewalt meets in his gaming circle. *Of Dice and Men* is an excellent read for anyone who doesn't understand the Dungeons and Dragons phenomenon, however, it is a fun read even for the experienced D&D player.

Chapter Titles:

- You're All at a Tavern
- Little Wars
- Grogards
- Druids with Phaser Guns
- Strength of Character
- Temple of the Frog
- The Breaking of the Fellowship

- Why We Play
- Arneson vs. Gygax
- The Satanic Panic
- Death or Glory
- Resurrection
- The Inn at World's Edge
- D&D Next
- The Song of Marv and Harry
- Pilgrimage

Farber, M. (2015). *Gamify your classroom: A field guide to game-based learning*. New York, NY: Peter Lang Publishing.

Matthew Farber argues for the inclusion of games in K-12 classrooms as a way of teaching the children of the 21st Century. Farber focuses primarily upon ways that public school teachers can improve education through gaming with a serious intent. *Gamify Your Classroom* shows how success can be achieved in unique ways, such as designing experiential role-playing based on successful digital and board game designs. Farber emphasizes the idea that freedom is an “absolute necessity” (p. 125) throughout the entirety of the work. *Gamify Your Classroom* also details successful methods for using fan fiction, even creating fan fiction for works such as Herman Melville’s *Moby Dick* (198). While *Gamify Your Classroom* places a heavy emphasis on digital games in addition to digital forms of motivation (such as badges). The work includes enough focus on role-acting as well as analogue gaming to be helpful to school teachers.

Chapter Titles:

- Games for Learning
- What Are Games?
- Who Plays Games...and Why
- Iterative Design
- Play-Based Learning
- Learning in Cooperative Mode
- Gamification and Quest-Based Learning
- Personalized Learning
- University Game Labs
- Video Games for Learning
- Communities of Play
- Creating Digital Games
- Games to Change the World

Ferdig, R. E., & Kennedy, K. (2014). *Handbook of research on K-12 blended learning*. Pittsburgh, PA: ETC Press.

Richard E. Ferdig, Summit Professor of Learning Technologies and Professor of Instructional Technology at Kent State University, and Kathryn Kennedy, Senior Researcher for MVU's Michigan Virtual Learning Research Institute, are the editors of this book, which is meant to be a resource for anyone interested in research, practice, or policy in the field of K-12 and blended learning. The editors cite the main goals of this handbook as to provide clear evidence of what is known and what is yet to be known in the field, to provide an empirical resource for researchers, and to set in motion a yearly close examination of the field. The handbook includes six major sections – a background

and historical perspective, research on learning and learners, K-12 learning in the content domains, research on teaching, research on the role of the other, and research on technological innovations. Each section includes chapters written by a number of various authors. This resource is targeted at anyone interested in the field of K-12 and blended learning, particularly in the areas of research, practice, and policy. The book is thoroughly researched and enlists a number of highly qualified authors.

Forsyth, R., Whitton, N., & Whitton, P. (2011). Accreditation! The responsive curriculum game. *Proceedings of the European Conference on Games Based Learning*, 176-182.

These conference proceedings describe research related to the implementation of board games and play-based methods in elementary classrooms. The authors found that communication among teachers allowed for the development of more board game applications, students were motivated to learn through the game play opportunities, and students enhanced their social skills by playing games with others. The social skills enhancement was found to make a notable positive difference in classroom management and climate. The teachers in the study planned to continue to use games in the teaching of academic standards.

Fullerton, T., Swain, C., & Hoffman, S. (2008). *Game design workshop: A playcentric approach to creating innovative games*. Boca Raton, FL: CRC Press.

Tracy Fullerton provides an excellent resource for prospective game designers. *Game Design Workshop* provides countless interesting tidbits about famous designers and processes. While it deals with the digital world, analog games are given a significant treatment throughout the work. Fullerton explains the best methods for prototyping any type of game in this expansive book that even includes methods for cost saving on game

drafts. It also includes exercises to help the readers with their own design productivity.

Game Design Workshop is primarily for readers who are interested in creating their own games and can be used as a textbook.

Chapter Titles:

- The Role of the Game Designer
- The Structure of Games
- Working with Formal Elements
- Working with Dramatic Elements
- Working with System Dynamics
- Conceptualization
- Prototyping
- Digital Prototyping
- Playtesting
- Functionality, Completeness, and Balance
- Fun and Accessibility
- Team Structures
- Stages of Development
- The Design Document
- Understanding the Game Industry
- Selling Yourself and Your Ideas to the Game Industry

Gaudart, H. (1999). Games as teaching tools for teaching English to speakers of other languages.

Simulation & Gaming, 30(3), 283-291.

This article discusses the introduction of games as a teaching tool that student teachers can use when teaching English to speakers of other languages. The article describes some of the games that have been tried and tested, reactions of the student teachers to the games, and some of the problems that student teachers will face when attempting to use games in secondary schools in Malaysia. This resource is relevant to educators (especially ESL teachers) who are interested in using games as teaching tools in their classrooms.

Gobet, F., de Voogt, A., & Retschitzki, J. (2004). *Moves in mind: The psychology of board games*. New York, NY: Psychology Press.

Gobet, de Voogt, and Retschitzki summarize the psychological research in board games.

The authors divide their work into the following eleven chapters:

- Introduction
- Formal Analyses of Board Games
- Theories of Board-Game Psychology
- Perception and Categorization
- Memory, Knowledge, and Representations
- Problem Solving and Decision Making
- Learning, Development, and Ageing
- Education and Training
- Individual Differences and the Neuropsychology of Talent
- Methodology and Research Designs
- Conclusions

The authors include a great deal of information that is supported by an extensive reference section. This book will be useful for those educators who want a deeper understanding of how the brain processes games. This knowledge can then be transferred to more effective teaching with board games. The book is not for the lay reader; it is an academic text that explores many research studies. The book will not be useful for the novice teacher of games, but is an important work for those wanting to explore games research at a deeper level.

Gough, J. (2013). Diversions: Tile-based strategy board games. *The Australian Mathematics Teacher*, 69(2), 36-37.

Written by John Gough, this article explores tile-based strategy board games. The article defines and describes tile-based games and introduces several examples of games that fit into the genre. Primarily, the game *Continuo* is discussed – including information on playing the game and learning the game. This resource is useful to those interested in the genre of tile-based board games. The article does not go into detail on educational uses for this type of game, but it does provide a useful description and understanding of the game genre.

Green, A. (Director). (2011). *Going cardboard* [Motion Picture]. United States: T-Cat Productions LLC.

Going Cardboard explores the evolution of board games, primarily from the American perspective, starting in the 1970s. The documentary explains that the evolution of board games began in 1978 with the creation of the *Spiel des Jahres* (Game of the Year in German). *Going Cardboard* focuses on how the arrival of *The Settlers of Catan* from Germany allowed Americans to discover the new breed of board games that had

developed from 1978 to the mid-1990s. when *The Settlers of Catan* made its way to America. The documentary introduces viewers to the community of game designers, publishers, and the devoted fans. *Going Cardboard* also displays the enormous SPIEL show in Essen, Germany, where over 150,000 people from around the world gather together to share their passion for board games. The documentary is an excellent resource for anyone wishing to study the rise of board games or those who want to better understand the production process of the modern board game.

Griva, E., & Semoglou, K. (2012). Estimating the effectiveness and feasibility of a game-based project for early foreign language learning. *English Language Teaching*, 5(9), 33-44.

This paper outlines the rationale for and the purpose of designing and implementing a project aiming to make very young EFL learners develop their language skills through their involvement in interactive psychomotor activities. The paper outlines a project that taught EFL in first primary schools through a combination of activities – including memory and word games, drawings, constructions, role-play games, and songs. In the gym, children participated in physical activities such as races, chases and hopscotch as well as dance and music activities, with the aim to improve their oral communicative skills and creativity. The authors conclude the project had an evident positive effect on developing very young learners' language skills, and on enhancing their motivation to participate in psychomotor activities. This article is relevant to EFL teachers who are interested in using games and other interactive activities to develop languages skills.

Gruson, B., & Marlot, C. (2016). Do teachers make all their students play the same learning games? A comparative study of learning games in biology and English as a second language. *Teaching Education*, 27(1), 1-20.

This article seeks to contribute to the identification of generic and specific features in the teaching and learning process. The authors outline a study of learning games in two different school subjects: Biology and English as a Second Language. Their analysis adopts a didactic viewpoint on what is going on in the class when the teacher and her students interact. At the end of the article, the authors mainly argue that more teacher training focused on “objects of learning” and “knowledge-in-use” is to increase epistemic access. This resource is relevant to educators who are interested in using games in their classrooms. The article is well written and thoroughly researched.

Hadley, K. R. (2014). Teaching teamwork skills through alignment of features within a commercial board game. *The International Journal of Engineering Education*, 30(6A), 1376-1394.

K. R. Hadley of the Chemical and Biological Engineering Department at South Dakota School of Mines & Technology is the author of this article on teaching teamwork skills to engineering students through alignment of features within a cooperative board game. The author first discusses how the professional skill of teamwork is crucial to engineering students and introduces the idea that cooperative board games are excellent resources for developing this skill. After providing thorough background, frameworks, and definitions for educational gaming, the author discusses how “alignment between game features and learning objectives must be achieved if implementation is to be successful” (p. 1379). The article then outlines important decision-making criteria in order to choose a game properly aligned with the learning objectives, including: approachable theme, short playtime, fun, and accessible cost. *Pandemic* is introduced as the chosen cooperative board game for best teaching teamwork according to the proposed criteria and learning

objectives. The author then describes the rules and learning possibilities of *Pandemic*, analyzes a study performed by engineering students in which they played the game, and evaluates the results. The article concludes that *Pandemic* was especially effective at developing important teamwork KSAs associated with intellectual diversity, task execution, and communication. This resource is thoroughly researched and skillfully written. Not only is it an excellent resource for engineering students and teachers, it is also relevant to other educators interested in incorporating board games as a part of learning. The article discusses many ways that board games – particularly cooperative board games – can teach valuable skills like teamwork. Various images of *Pandemic*, graphs of research results, and an appendix of *Pandemic*'s rules are also included in the article.

Harrer, S., & Schoenau-Fog, H. (2015). Inviting grief into games: The game design process as personal dialogue. *Digra 2015 - Conference Proceedings: Digra Digital Library*, 12, 1-15.

This article is written by Sabine Harrer and Henrik Schoenau-Fog. The authors investigate how game designers might initiate a dialogue with underrepresented groups, infusing design with individuals' personal stories and imaginations. The game *Jocoi* is introduced as an example – a game which aims at mediating the experience of loss and grief over a dead baby. This article looks at different paradigms of emotion in games, potential dangers, and incorporating personal experiences into game design. The authors discuss and describe in detail the process of creating *Jocoi*. The authors conclude that *Jocoi* “is a suitable tool to foster dialogue about their (mothers’) loss”, and that “for us, it was an exercise in learning how to listen” (p. 14). This article is targeted at game

designers and researchers who are interested in games that tackle complex or taboo subjects. The article is thoroughly researched and well-written. While the idea of board games being used for learning is not addressed specifically in this article, the authors do conclude that games relating to grief can be beneficial both to the grieving and to those who know people dealing with grief.

Harris, C. (2013). Gaming the common core. *School Library Journal*, 59(10), 1.

Christopher Harris – librarian and passionate gamer – is the writer of this *School Library Journal* article on the role of analog games in education. In this article, Harris promotes board games as excellent instructional tools for teachers and librarians, highlighting their complexity and the research put into them by designers. Harris goes on to say that “games like this satisfy the Common Core’s call for new types of resources strong in detail and worthy of deep study” (p. 1). This article provides several examples of historical analog games, including *Freedom: the Underground Railroad*, *1960: The Making of the President*, and *Twilight Struggle*, each which satisfies the Common Core’s pedagogical requirements for literacy and research. In addition to discussing games centered on learning, this article mentions that simple games such as *Quiddler*, *Set*, and *Word on the Street* are also valuable in that they “can offer a mental refresh for students” (p. 2). This article concludes by stating that librarians should become experts of board gaming, as play is a process skill like information fluency, and thus libraries should become “the heart of a continuing trend toward infusing games and play into learning” (p. 2). This resource is especially targeted towards librarians, but it would also be beneficial for other educators. Though the content is brief, it is informative and well

written. While no resources are used to strengthen the article, it still presents a clear and solid argument for the use of analog gaming in education.

Hinebaugh, J. P. (2009). *A board game education*. Lanham, MD: Rowman & Littlefield Education

Jeffrey Hinebaugh provides a simple exposition of the educational uses of various types of board games. He utilizes very common American games to represent the various educational uses for these board games. Hinebaugh employs a journalistic writing style that makes the work accessible to nearly any reader. While he does not go into an inordinate level of detail on any particular game, Hinebaugh provides fun details about each example that he uses. The author examines the games from an educational viewpoint, often employing key terms that will be readily recognized by educators at any level. His use of anecdotes provides a conversational tone to the work. *A Board Game Education* concludes that Einstein played board games and that kids should continue to play games since their educational value is obvious. It is an excellent read for any educator, but particularly for earlier levels of education.

Chapter Titles:

- Board Games as Educational Tools No Kidding
- Board Games Social Science and Early Educational Skills
- Spell That Word Board Games and Language Arts
- I Will Buy It Board Games and Economics
- Who Done It? Where Is It? What Is It? Logic and Deductive Reasoning
- Capture and Conquer Board Games and Strategy Planning and Negotiation
- Out of the Blue Board Games and Creative Thinking Communication and Expression

- Board Games and Advanced Game Theory and Mathematics
- We Have a Winner Conclusions and Observations

History Today. (2015). Board gaming with historians. Retrieved from

<http://www.historytoday.com/history-today/board-gaming-historians-vikings>

In this video series, a board game enthusiast plays a board game with professional historians. The players explain the game rules and describe the objective to the viewers. The historians discuss the accuracy of the game's representations of historical facts. Furthermore, the historians discuss the details of the game pieces, the language used in the game description, and how the game represents the people of the time the game represents. This web series will be useful for secondary social studies teachers as well as college history professors. The videos are short and do not include a lot of detail, but do provide a good overview of the historical accuracy of the game.

Hromek, R., & Roffey, S. (2009). Promoting social and emotional learning with games: It's fun and we learn things. *Simulation & Gaming, 40*(5), 626-644.

Written by Robyn Hromek and Sue Roffey, educational psychologists of the University of Sydney and University of Western Sydney respectively, this article promotes social and emotional learning with games by first reviewing the literature on the subject, and then arguing that games are a powerful way of developing social and emotional learning in young people. The article first defines and describes social and emotional learning, as well as discusses research and effective programs for SEL (social and emotional learning). The article continues by looking at how fun and games create positive emotions in learning, and how that enhances people's capacity to learn. The authors discuss game-based learning and SEL, game-based learning and resilience, cooperative

and competitive learning, and examples of therapeutic board games in order to illustrate their points. Finally, the article goes into facilitation in the delivery of game-based learning and introduces various facilitation approaches and debriefing tools. This article is targeted at educators or others interested in using games to facilitate learning. This resource is thorough in its research, and it provides excellent illustrations of its main points.

Huang, A., & Levinson, D. (2012). To game or not to game: Teaching transportation planning with board games. *Transportation Research Record: Journal of the Transportation Research Board*, 2307, 141-149. <http://dx.doi.org/10.3141/2307-15>

Written by Arthur Huang and David Levinson, this article looks at using board games to teach transportation planning. The article begins by discussing different learning styles and how board games are better qualified to provide for the typical learning styles of engineering students than the typical “chalk and talk” procedure. Then, literature on using games in teaching is discussed, followed by a detailed description of the authors’ own research method that proposed the connection of transportation board games and teaching transportation planning. Next, the article explains how the authors applied such board games in graduate-level classes. To conclude, the authors summarize what was learned from this experiment and provide recommendations for future teaching practice. This resource is useful for educators interested in games and learning, as well as those in the field of transportation planning. The article is well written and researched, and introduces multiple board games on the subject as examples. Useful tables and figures are also provided to illustrate the authors’ study.

Hunter, N. (2011). European settlement in Australia. *Agora*, 46(4), 65-71.

Nathan Hunter, an education student at Monash University, is the author of this article, which describes an original board game that teaches about European settlement in Australia. The game was created for students of Australian history. This article introduces the game and its pedagogical intent, describes the process of preparing the game, and includes basic instructions on its gameplay and mechanics. Various resources required to play the game are also included. This resource provides a thorough summary of the game in question, but it does not go into further detail on the subject of games and learning. However, board game developers and educators interested in creating games for their classrooms could benefit by reading this article as an excellent example of creating and using an analog game for learning.

Kapp, K., Blair, L., & Mesch, R. (2014). *The gamification of learning and instruction fieldbook: Ideas into practice*. San Francisco, CA: Wiley.

The *Gamification of Learning and Instruction Fieldbook* is not intended to be read once and then entombed on the bookshelf, instead, it is a field manual for educators as well as Learning and Development professionals. It differentiates between simulations and gamification in order to provide as precise of a handbook as possible. As a manual, the book does not function in a traditional linear narrative format. However, it provides examples for numerous fields including sales and the process of on-boarding new employees. The authors examine the primary critiques of gamification and carefully address each of them with the thoughtful consideration of a master educator. The book's focus on the implementation of gamification without avoiding the underlying theory makes it an exquisite read for educators.

Chapter Titles:

- How to read and Use this Fieldbook
- Why Games, Gamification, and Simulations for Learning?
- Game, Gamification, or Simulation: Which is Best, When, Why?
- Critical Questions for Creating an Interactive Learning Event
- Foundational Elements
- The Importance of Narrative/Context/Story
- Making the Case
- Managing the Process
- Where Do Find Ideas
- Games
- Gamification
- Simulations
- Technology Tools
- Storyboarding
- The Knowledge Guru
- A Board Game: MPE
- Mobile Gamification: Mobile Cricket U
- Serious Games: Learning to Negotiate
- Structural Gamification for On-Boarding Employees
- Medical Simulations
- Financial Game-Based Learning
- Sales Training Game: An Avaya Case

Kapp, K. M. (2012). *The gamification of learning and instruction: Game-based methods and strategies for training and education*. San Francisco, CA: Pfeiffer.

The Gamification of Learning and Instruction provides research backed recommendations for the use of gamification in multiple settings and is written to allow handbook style readership. Karl Kapp includes the educational and psychological theory behind gamification, going through the renowned names such as Pavlov, Skinner, and Vygotsky. Kapp argues that research clearly shows that games are an effective tool for learning at almost any level. Kapp explains what gamification is capable of accomplishing in various settings. He also includes examples of gamification in the real-world such as the Louisiana State University football team's use of a custom-made video game and the NikePlus product's success in helping customers with their weight loss. Kapp balances the perspective of the gamer as opposed to the designer to help the readers better understand the whole of gamification. *The Gamification of Learning and Instruction* is an excellent read for anyone who is interested in using gamification in their workplace.

Chapter Titles:

- What is Gamification
- It's in the Game: Understanding Game Elements
- Theories Behind Gamification of Learning and Instruction
- Research Says...Games Are Effective for Learning
- Leveling Up: What Gamification Can Do
- Achiever or Killer? Player Types and Game Patterns
- Applying Gamification to Problem Solving

- Applying Gamification to Learning Domains
- Managing the Gamification Design Process
- Congratulations! Selecting the Right In-Game Achievements, by Lucas Blair
- Perspective of a Gamer, by Nathan Kapp
- Casual Game Site: DAU Case Study, by Alicia Sanchez
- Alternate Reality Games for Corporate Learning, by Koreen Olbrish
- If You Want to Learn More, Play Games

Kim, B. (2015, February). Designing gamification in the right way. *Library Technology Reports*, 51(2), 29-35.

Bohyun Kim examines the benefits of the gamification phenomenon, as well as the pitfalls that must be avoided when applying gamification to the classroom or office. Gamification can provide many benefits both to educators as well as to students. The target group is one of the primary factors whenever an educator is attempting to utilize games in education. However, as Kim points out, gamification has a dark side and the article focuses primarily on the dark side of gamification. Kim explains that people hate to feel manipulated and that poorly constructed games are disliked as tools of exploitation. Additionally, she argues that rewards alone are not enough to prevent players from disengaging from the games if they feel exploited by the authority figure. She concludes that the limited reach of gamification should not detract from its value, but should help educators to properly utilize this new tool. The article is an excellent read for educators who wish to implement gaming into their classrooms.

Kirsch, B. A. (2014). *Games in libraries: Essays on using play to connect and instruct*. Jefferson, NC: McFarland & Company.

In *Games in Libraries*, Breanne Kirsh compiles the debates and ideas, which have swirled around gamification in the library setting for the past decade. Kirsh explores the purposes and uses of gamification in American libraries. She provides the necessary goals for gaming and references many of the best works on the topic. *Games in Libraries* gives many different methods for implementing gamification, even in traditional library settings, such as the treasure hunt style game implemented by the Wilson Library at the University of North Carolina at Chapel Hill. In the Wilson Library example, Kirsh walks the audience through the entire process, from implementation and progress measurement to the conclusion. The detail in *Games in Libraries* allows the audience to confidently approach gamification without the fear of unfamiliarity. Virtually every type of game is addressed with impressive detail in *Games in Libraries*, from simple board games and digital games to alternate reality games such as the zombie apocalypse game at the Penn State University library. Additionally, Kirsh addresses every type of library from the small and poorly funded library to the grandiose academic monolith. *Games in Libraries* is a quintessential read for any librarian.

Chapter Titles:

- Levels of Game Creation
- Knowing When to Create a Library Game
- The State of The Game: ALA Games and Gaming Round Table
- Gamification in Libraries
- Changing the Game: Using Badges to Assess Information Literacy Instruction
- Creating a Literary Gaming Experience

- Welcome to My Multiverse: Gaming for the Most Voracious and Eclectic of Avid Readers
- In the Library with a Candlestick: Adapting *Clue* for the Special Collections Library
- Learning with Games in Medicine and Healthcare and the Potential Role of Libraries
- Searching for Blackbeard's Treasure: Using an Interactive Information Literacy Game to Reach Transfer Students
- Beyond the Board: Alternate Reality Games in Libraries
- A Bag of Tricks for Successful Library Games
- Game Making Resources for Librarians, A-Z and Beyond: An Annotated Bibliography

Kriz, W. C. (2009). Bridging the gap: Transforming knowledge into action through gaming and simulation. *Simulation & Gaming: An Interdisciplinary Journal*, 40(3), 28-29.

This article by Willy Kriz, Professor at FHV University for Simulation and Game Design, introduces several other articles by various authors that demonstrate how “gaming simulation has much to offer when we change from the passive reproduction of inert knowledge to the active production of applicable knowledge and to the development of useable competencies” (p. 28). The first article from Klabbers points out that there are two levels of design – small scale and large scale – and each has different teaching purposes. Klabbers’ article also describes the history of gaming and simulation, as well as its social and scientific developments. Lainema’s article asks if and how the constructivist learning paradigm increases what we know about the learning processes within simulation gaming. Fischer and Barnabe’s article presents the uses of gaming simulation approaches within a company, and Wenzler’s article looks a simulation

gaming from a consultant-practitioner's perspective. Finally, the last article by Hense, Kriz, and Wolfe, looks at evaluations of games as teaching devices. This article by Willy Kriz does not go into detail on any of these sub-articles, but simply introduces them. This article serves as a good introduction and summary of these articles for those who want to read them in *Simulation & Gaming: An Interdisciplinary Journal*. The resource is targeted at educators and scholars introduced in using gaming and simulation to produce “applicable knowledge and the development of useable competencies” (p. 28). This article is short, however, and the majority of its content is simply the summary of the other articles.

Lankoski, P., & Bjork, S., (2015). *Game research methods*. Pittsburg, PA: ETC Press.

Petri Lankoski, senior lecturer in game research at Soderton University, and Staffan Bjork, Applied IT professor at Chalmers and Gothenburg University, are the editors of this book on game research methods. The book discusses a variety of methods and research approaches related to the study of games. This book consists of chapters by various authors, and these chapters are split up into five main parts – qualitative approaches for studying games, qualitative approaches for studying play and players, quantitative approaches, mixed methods, and game development for research. This resource is targeted at those interested in studying games and learning about game research methods. The book is adeptly researched and enlists a variety of highly qualified authors. The wide range of research methods and topics discussed within make this book an excellent resource to assist with conducting game-based research.

Lederman, L., & Stewart, L. (1987). The Marble Company: The design and implementation of a simulation board game. *Simulation & Games*, 18(1), 57-81.

Written by Linda Lederman and Lea Stewart of Rutgers University, this article looks at the simulation board game *The Marble Company* – a game designed to present participants with experiences in organizational communication and information management within complex organizations. The authors describe the background, design process, and learning objectives before providing specific details of the game – which include roles, interactions, and rules. Implementation, evaluation, and modification are then discussed, as well as the game’s validity, reliability, and utility. Finally, the authors discuss the debriefing of the game, including advice and potential questions for the game director or facilitator. The article concludes that “*The Marble Company* exemplifies one of the processes game designers may follow in the creation, design, and implementation of a complex simulation game for instructional purposes” (p. 80). This article is useful for teachers of the information sciences and other educators interested in using games for instructional purposes. The potential learning outcomes of *The Marble Company* are discussed in detail, and the authors succeed at connecting this individual example to the larger subject learning through simulations and gaming.

Liu, M., Rosenblum, J. A., Horton, L., & Kang, J. (2014). Designing science learning with game-based approaches. *Computers in the Schools: Interdisciplinary Journal of Practice, Theory, and Applied Research*, 31(1-2), 84-102.

In this article, the authors examine game-based learning by describing a learning environment that combines game elements, play, and authenticity in the real world for the purpose of engaging students’ learning of science and enhancing student motivation. The authors review related literature, and then provide a description of the research context of their studies – which used the digital game *Alien Rescue* to engage sixth grade students

by challenging them to solve a complex problem. Previous research findings on *Alien Rescue* are examined, and then the authors' present study is discussed in detail. This resource is targeted at educators interested in using digital games within a learning environment. The authors thoroughly discuss their study using *Alien Rescue*, and related literature and research is provided.

Lucht, M., & Heidig, S. (2013). Applying HOPSCOTCH as an exer-learning game in English lessons: Two exploratory studies. *Educational Technology Research and Development*, 61(5), 767-792.

This article describes *Hopscotch*, a design concept for an exer-learning game to engage elementary school children in learning. Exer-learning is a new genre of digital learning games that combines playing and learning with physical activity. The article describes *Hopscotch* in detail, and then outlines two exploratory studies at a German elementary school, in which the authors investigated the potential of the game to engage students and facilitate the acquisition of English vocabulary knowledge. The results of these studies indicated that the students remembered and correctly spelled about the same number of new vocabulary words after learning with *Hopscotch* as they did after a teacher-centered lesson. However, students enjoyed this learning method much more, and they reported better attitudes to learning with *Hopscotch* than with teacher-centered lessons. Thus, the authors suggest that exer-learning games could serve as additional classroom control and teaching aids in schools. This resource is relevant to ESL teachers or other educators who are interested in using exer-learning games in classrooms. The article is well written, clear, and thoroughly researched.

Mannamaa, I. (2015). Fountains: Table-top simulation game on acculturation strategies.

Simulation Gaming, 46(1), 113-126.

This article is written by Ivar Mannamaa, of the University of Tartu's department of culture education. The article looks at the simulation game *Fountains* – a game that was created to help explore cultural integration strategies. *Fountains* was designed for upper secondary schools, but it can also be played by younger or older learners. This article first describes basic data associated with the game – including its contents, objective, and setting. Next, Mannamaa writes a guide for facilitators of the game, which includes preparation, team formation, game instructions, starting and ending the game, in-game debriefing, etc. Finally, the author discusses post game debriefing and concludes “*Fountains* enables discussion of the main aspects of intercultural integration and consideration of them from a new perspective” (p. 123). This article is targeted at educators who might be interested in using this game for their classrooms, as well as others interested in games and learning. While the game *Fountains* is discussed in detail, it is the only example provided of how games can be used for teaching intercultural integration. The article is well written and provides several visual examples of the board game.

Manusos, D. O., Busby, J. R., & Clark, A. C. (2013). Authentic design in gaming: Changing the rules of play. *Technology and Engineering Teacher*, 72(8), 8-13.

This article looks at gaming and education by discussing how game design can be used as a learning tool. The authors discuss the idea of learning while playing both video games and board games. The similarities and differences in designing video games versus board games are discussed. The authors introduce various methods of creating activities to teach game design, as well as the benefits of doing so. This resource is targeted at

educators interested in teaching game design in their classrooms. The article is well written and contains valuable introductory information on developing a game design curriculum.

Marjanen, P. (2010). Serious game pedagogy as a perspective on children's learning.

Proceedings of the European Conference on Games Based Learning, 235-241.

Written by Paivi Marjanen, Laurea University of Applied Sciences, this article looks at the game *Konkkaronkka*, a board game developed to support children's social and emotional learning. First, this article describes the creation process of the game, its basic rules, and its goals. Development of emotions and feelings, practice with basic motor skills and movement, peer group learning and community, and humor are all important elements of the game. Next, Marjanen gives a basic outline of Vygotsky's perspective for learning and developing, and describes how *Konkkaronkka* fits into that perspective. Finally, information is provided on the research methods and questions used to study how successful the game was with real children. The author concludes the article by discussing evaluation of the game and possibilities for its future development and expansion. This resource is relevant to those involved in children's education and/or interested in the use of board games for learning. This article is well written, well researched, and full of valuable information regarding both the game *Konkkaronkka* and the types of games that are the most beneficial for early childhood education.

Martin, A. (2000). The design and evolution of a simulation/game for teaching information systems development. *Simulation & Gaming*, 31(4), 445-463.

This article by Andrew Martin of the University of Warwick reflects on the design and evolution of simulation and gaming for teaching information systems and development

from a management perspective. Martin graduated in mathematics from the University of Cambridge, and he has worked as an information systems professional for nine years. To begin this article, Martin describes how simulations and games can aid in learning by providing opportunities to do, not just to be taught. Martin then describes how simulation/games to can be used to teach information systems and development. The article introduces two board games – *The Misgame* and *Information Systems Project Manager* as examples of games that teach this subject. These games are then analyzed in terms of learning objectives, design framework, and process framework. Finally, the games are critiqued based on player feedback and discussed in terms of difference, strengths, and weaknesses. It is determined that both of these games are innovative and valuable to the teaching and learning of information systems and developing concepts. Martin concludes by stating, “the simulation/games open up possibilities for use as research tools for investigating factors that influence the behavior and performance of information systems project managers” (p. 461). This resource is targeted at educators interested in the use of simulation and gaming for learning. While especially relevant to those involved in teaching information systems development, this article is useful to educators in all areas. This article is full of quality research and contains an extensive list of references. It is well written and organized.

Mary, B. (2010). Bringing play back to the classroom: How teachers implement board and card games based on academic learning standards. *Proceedings of the European Conference On Games Based Learning*, 13-18.

These conference proceedings describe research related to the implementation of board games and play-based methods in elementary classrooms. The authors found that

communication among teachers allowed for the development of more board game applications, students were motivated to learn through the game play opportunities, and students also enhanced their social skills by playing games with others. The social skills enhancement was found to make a notable positive difference in classroom management and climate. The teachers in the study planned to continue to use games in the teaching of academic standards.

Mayer, B., & Harris, C. (2010). *Libraries got game: Aligned learning through modern board games*. Chicago, IL: American Library Association.

This is one of the premier resources for any library interested in introducing or increasing gaming into their library programming. Brian Mayer and Christopher Harris have created an excellent resource for educators to utilize the benefits of games in their classrooms and libraries. They include an appendix outlining numerous games, with excellent details on how the game can be used for educational purposes. *Libraries got game* examines state as well as national curriculum standards in order to demonstrate how games can be used to teach those standards. Mayer and Harris also help educators by explaining the practical application of the games in the classroom or library, which provides a certain level of confidence to the educator.

Chapter Titles:

- Designer Games
- Why Games Matter
- Redefining Resources
- Library and Information Skills
- Alignment with State and National Curriculum Standards

- The Genesee Valley Model
- Starting a Game Collection
- Top Recommended Games for Elementary School: Pre-K through Grade 5
- Top Recommended Games for Middle School: Grades 6-8
- Top Recommended Games for High School: Grades 9-12

McGonigal, J. (2011). *Reality is broken: Why games make us better and how they can change the world*. New York, NY: Penguin Press.

Jane McGonigal provides an excellent narrative about the benefits of games to humankind in the 21st Century. She provides the flow of a good journalistic piece while addressing theory and practice of beneficial games. She also uses her own experiences in dealing with prolonged concussion symptoms. She explains how games can help people to overcome their circumstances or even work on mundane chores if they are executed properly. The book argues that people must view games as a part of their lives in order to utilize the potential of games, and states that games do not distract us from our real lives, but rather fill our lives with many positives. McGonigal states that games “aren’t leading us to the downfall of human civilization. They’re leading us to its reinvention” (p. 354).

Reality is broken combines a compelling message with excellent flow and solid reasoning. It is an excellent read for anyone wanting to understand games or how they can be used for positive good.

Chapter Titles:

- What Exactly Is a Game?
- The Rise of the Happiness Engineers
- More Satisfying Work

- Fun Failure and Better Odds of Success
- Stronger Social Connectivity
- Becoming a Part of Something Bigger Than Ourselves
- The Benefits of Alternate Realities
- Leveling Up in Life
- Fun with Strangers
- Happiness Hacking
- The Engagement Economy
- Missions Impossible
- Collaboration Superpowers
- Saving the Real World Together

Meyers, K. (2008). *Paid to play: The business of game design*. Bloomington, IN: iUniverse.

Keith Meyers provides a brief and easily understood manual for would-be game designers. He explains the differences in the various American markets as well as the broad European market. He delivers systematic instructions for where he suggests beginning when designing your own game with ten simple steps. The book breaks down core concepts of board games and gives a list of various game mechanics that are used by popular games. Meyers goes into detail about the process of prototyping new games as well as the process of play testing designs to properly shape them into playable and sellable games. The book naturally deals with self-publishing and explains what designers should do as well as the pitfalls that they should avoid. Finally, it explains at length the process of submitting a design and the core of contracts with publishers. Overall, *Paid to Play* falls short for serious designers who will be turned off by the

brevity of the work; casual readers, on the other hand, will be refreshed by this brief treatment of game design.

Chapter Titles:

- Defining Our Framework
- Defining the Game Inventor
- The Game Industry
- Where to Start?
- Prototyping
- Play Testing & Revisions
- Self-Publishing
- Licensing
- Submissions
- Success

Millians, D. (1999). Simulations and young people: Developmental issues and game development. *Simulation & Gaming*, 30(2), 199-226.

This article is written by David Millians of Paideia School. The article begins by describing the age-related developmental issues that teachers and writers deal with in developing and implementing educational games and simulations. Then, the article examines the process of creating a 19-week simulation for 10 and 11 year olds – including the development of the simulation, the setting for the game, the characters used in the game, and the physical display of the game. The actual experience of introducing the simulation and playing the game is also summarized and discussed. The author concludes with the statement that “we are more powerful teachers when we have both a

working knowledge of human developmental issues and of the flexibility of the art of game design itself” (p. 217). This resource is relevant to all educators and researchers interested in using games and simulation as pedagogical tools for learning. The article is well organized and well researched. The topic is broad, but the author well summarizes the benefits of simulations for young people. An extensive appendix of sources for simulation and gaming is also provided, as well as additional related appendixes.

Moizer, J., & Lean, J. (2010). Toward endemic deployment of educational simulation games: A review of progress and future recommendations. *Simulation & Gaming, 41*(1), 116-131. The authors of this article are Jonathen Moizer PhD and lecturer in business operations and strategy, and Jonathan Lean PhD and senior lecturer in strategic management. This article presents a conceptual analysis of simulation game adoption and use across university faculty. The metaphor of epidemiology is used to characterize the diffusion of simulation games for teaching and learning. The authors first look at the background of the diffusion of simulation games. They then look at faculty adoption of simulation games, scenarios for simulation game adoption, and strategies for increasing simulation game adoption. Finally, this article concludes by asking and discussing if instruction with simulation games can ever become endemic among faculty. This resource is targeted in those interested in educational simulation games – specifically, those interested in the use of such techniques across university faculty. The article is well written and thoroughly researched, and it provides multiple tables and figures to illustrate the authors’ points.

Nicholson, S. (2011). Making gameplay matter: Designing modern educational tabletop games. *Knowledge Quest, 40*(1), 60-65.

Scott Nicolson, professor of game design and development at Wilfrid Laurier University, wrote this article. The primary goal of this article is to outline the process of designing tabletop games for the purpose of education. To start, the author discusses the problems with question-based games, and offers solutions to making these types of games more engaging and successful in an educational setting. However, the author states that “a better approach to educational design is to move away from asking questions” (p. 62), as games with intrinsic integration of content are more valuable for teaching new knowledge. Finally, this article describes in detail the process of creating original games, integrating educational content, developing and testing the prototypes, and considering publication options. The author concludes by stating that “the process of building a game that has players engaging with course topics (instead of simply asking questions about the topics) is challenging, but can result in a game that is much more effective as a pedagogical tool” (p. 65). This resource contains valuable information about using and creating games for educational purposes, and is especially relevant to teachers and librarians. Though the focus of the article is on the process of creating original analog games, it also promotes the use of already created games for learning. This article is well written and contains many useful examples and instruction on creating and using board games for learning.

Nicholson, S. (2010). *Everyone plays at the library: Creating great gaming experiences for all ages*. Medford, NJ: Information Today Inc.

Scott Nicholson provides a detailed analysis of gaming options for libraries to better enhance patron service. He explains unique methods for fulfilling library functions through real-life examples, such as how the University of Dubuque taught informational

literacy through *Fantasy Football*. The book provides examples of good games for libraries to purchase, with detailed information about each of them. Nicholson also provides information about how and when digital games can be used in a library setting. *Everyone Plays at the Library* focuses primarily upon how libraries, both public and academic, can incorporate games into their space. Nicholson prevents the reader from getting bogged down with a splendid flow to the work. *Everyone Plays at the Library* is a quintessential resource for any librarian or educator. While librarians are the primary audience, the work can still provide useful information for others who wish to use games in a learning commons area.

Chapter Titles:

- Games and the Library's Mission
- Games versus Gaming Experiences
- A Conceptual Model of the Library Gaming Experience
- Knowledge Gaming Experiences
- Strategy Gaming Experiences
- Narrative Gaming Experiences
- Social Gaming Experiences
- Planning the Gaming Experience
- Facilitating the Gaming Experience
- Marketing and Partnerships
- Assessment and Justification
- Keeping Up and Focusing on the Fun

Nicholson, S., & Harris, C., (2008). Broadening our definition of gaming. *Library Technology*

Reports, 44(3), 7-11.

This article is in two parts – the first is a case study by Scott Nicholson, and the second is a case study by Christopher Harris. In the first case study by Nicholson, the author looks at modern board games and the differences between modern gaming and American classics like *Monopoly* or *Risk*. Nicholson then offers challenges and suggestions for modern gaming. He says that “we are in a new golden age of board games, as the variety of designs and experiences continue to grow at a rapid pace” (p. 10). The second case study, written by Harris, explores tabletop gaming within libraries. He specifically discusses using board games in a school library setting, and thus choosing games with educational merit. The article provides a final summary by stating that “modern tabletop games have evolved to include even greater degrees of literacy and engaging play, making many of them appropriate for use in libraries” and that “there are many modern board games that complement classroom learning activities and engage students in active learning” (p. 11). This resource is beneficial for anyone interested in tabletop gaming, learning about gaming, or in using such games for education purposes. While the article is not highly researched, the two case studies provided are well written and contain valuable information and resources on the subject.

Orbanes, P. (2004). *The game makers: The story of Parker Brothers from Tiddledy Winks to Trivial Pursuit*. Boston, MA: Harvard Business School Press.

Philip Orbanes in *The Game Makers* focuses on the evolution of Parker Brothers from George Parker’s first homemade game to the present. Orbanes provides a splendid narrative replete with interesting anecdotes and fascinating history. Throughout the book, Orbanes connects the story of Parker Brothers with the major historical events that

influenced the game company, such as the rise of the *Ouija* game during the Vietnam War. The work struggles, however, from a problematic tendency to lapse into more subjective treatment of the material when discussing, General Mills, Hasbro and the decline of Parker Brothers within the Hasbro group. *The Game Makers* provides an exciting narrative filled with colorful characters while explaining the rise and decline of one of the most influential American game makers of the 20th Century. Orbanes' *The Game Makers* is an excellent resource for researchers and casual readers alike, showing how accessible a well-written historical work can be to the public.

Chapter Titles:

- First Moves
- Learning the Game
- Dealing with Setbacks
- Rolling Doubles
- Running Up the Score
- New Rules
- Back to Go

Paino, M., & Chin, J. (2011). Monopoly and critical theory: Gaming in a class on the sociology of deviance. *Simulation & Gaming*, 42(5), 571-588.

Maria Paino and Jeffrey Chin, of the sociology departments of the University of Georgia and Le Moyne College respectively, wrote this article. The authors demonstrate how the board game *Monopoly* was modified to use as an educational simulation to help students understand difficult sociology material – critical theory, specifically. First, the article discusses how simulations and games are proven pedagogical tools in the teaching of

sociology. They then outline their process of adapting *Monopoly* to fit their educational goals, and they discuss the class activity of actually playing the game and the research outcomes and method. Finally, the data results are analyzed and discussed in a debriefing. The authors conclude with a summary of how the game helped students understand critical theory, and a consideration of future research on the subject. This resource is specifically relevant to sociology students and educators, but it would also be useful to other educators interested in using simulations and games as pedagogical tools. The article provides a thorough description and educational analysis of the target game, is well researched, and well written. An appendix is also provided with the full rules for the modified version of *Monopoly*.

Pappas, J. (2013). Board in the library, parts one-six. Retrieved from

<https://www.webjunction.org/news/webjunction/board-in-the-library-part-one.html>

John Pappas, branch manager at the Bensalem Branch of the Bucks County Free Library System, is the author of this six-part web article on board games in the library. The first part is an introduction to gaming, the many types of games, and an analysis of the traits that make board games best for libraries – including wide decision space, deep strategy and tactical decision making, player interaction, game mechanisms, and narrative potential. The second part of this web article looks more in detail at specific types of games – introducing classic games, party games, gateway games, filler games, and bait games. This section concludes with a list of YouTube channels about analog gaming. Part three compares thematic games to strategic games and describes why it is important to understand the difference between the two. Part four looks at various types of interactions in gaming, including social interaction, solitary games, friendly competition, direct

competition, and cooperative interaction. The fifth section looks more in depth at game mechanics, including cooperation, real-time action, worker placement, area control, and deck-building games. Finally, the sixth installment of this web article discusses the basics of setting up a board game night at a library – including how many people should attend, how to promote the event, what types of games to provide, should the librarian actually play, etc. This resource is specifically aimed at librarians interested in adding board games collections and/or holding board game events at their institutions. The article contains detailed information on different types of board games and their value, as well as providing excellent instructions and tips for developing a collection and organizing events.

Parlett, D. (1999). *The Oxford history of board games*. Oxford, UK: Oxford University Press.

The Oxford History of Board Games provides a simple catalog of hundreds of games from hallowed antiquity to the close of the 20th Century. Parlett supplies excellent accounts of a wide range of games that span centuries, as well as descriptions of how they were played by the original users. *The Oxford History of Board Games* is excellent for any reader who wants to know more about ancient games and how they were played.

Chapter Titles:

- Welcome Aboard
- The Role of the Dice
- Getting Home
- The Tables Turned
- Back to Square One
- No Dice

- All in a Row
- Across the Board
- Making Arrangements
- Restrictive Practices
- Space Control
- Corner Your Fauna
- Bean and Gone
- War and Pieces
- Take That!
- Conquering Kings
- Diversions and Deviations
- The Thought that Counts
- Variations on a Theme

Pedersen, P. (1995). Multipoly: A board game. *Simulation & Gaming*, 26(1), 109-112.

This article by Paul Pedersen (Syracuse University) describes the board game *Multipoly* – a game which has different rules for each culturally different player. The board game has the players choose a certain problem or event in which their cultures would interact in real life, and then choose positive and negative events that could occur as a part of that event. Pedersen’s article describes the process of designing the game board (which is a part of the game itself), the various steps of play, the rules of play, notes for the game director, and possible variants. The article concludes with a description of the debriefing process, which involves participants considering cultural dynamics and disparities within their teams, as well as how they might do things differently “in order to better

accommodate cultural or ethnic differences” (p. 112). This resource is useful for educators and learners seeking “to explore the advantages and disadvantages of various cultural groups working together on the same problem or in the same setting” (p. 109). Pedersen describes the game and its merits clearly and concisely, and additionally provides possible questions to ask during debriefing to stimulate learning.

Peppler, K., Danish, J. A., & Phelps, D. (2013). Collaborative gaming: Teaching children about complex systems and collective behavior. *Simulation & Gaming, 44*(5), 683-705.

The authors look at collaborative games and how the games can be used to teach children about complex systems and collective behavior. The authors give a background on collaborative games and how they can be used in learning. The board game *Hivemind* is then introduced – a game that can be either competitive or collaborative, designed with the instructional goals of teaching students the process of nectar collection. Several overarching research questions are addressed, which seek to explore the results of a study in which students played the game both competitively and collaboratively. The article concludes with a debriefing and discussion that includes possibilities of future research in collaborative gaming. This resource is targeted specifically at those involved in gaming and interested in the use of board games in education. The article includes thorough research and an excellent analysis of the study of the game *Hivemind*. However, the article is limited in that it does not look at any other collaborative games besides *Hivemind*.

Peterson, J. (2012). *Playing at the world: A history of simulating wars, people and fantastic adventures, from chess to role-playing games*. San Diego, CA: Unreason Press.

Jon Peterson presents an impressively well-researched history of the role-playing games. The book is very detailed. The authors wrote a narrative full of interconnecting characters who laid the foundation for modern role-playing games. Peterson delivers a solid work that would impress any academic historian, without sacrificing the flow of a best-seller. Peterson traces the origins of role-playing games from the earliest simulations and military war games with a stunning expositional narrative. He shows how Prussian war games (simulations at their core) included an umpire who filled the role similar to RPG game masters. While the book is quite extensive, 698 pages in total, it is an excellent addition to the literature of role-playing games. *Playing at the world* is a quintessential addition to any educator's library, especially for those who are interested in simulation or role-playing games.

Chapter Titles:

- A Prelude to Adventure
- Setting – The Medieval Fantasy Game
- System – The Rules of the Game
- Character – Roles and Immersion
- The Dawn of Role Playing

Petsche, J. (2011). Engage and excite students with educational games. *Knowledge Quest*, 40(1), 42-44.

Written by Jennifer Petsche, writer and editor for Patch Products Inc., this article discusses how to engage and excite students with educational board games. It points out that “using educational games to learn or reinforce lessons engages students and turns a potentially boring subject into something exciting and desirable to know” (p. 43). The

article goes on to describe several benefits of using board games for education, including helping students better understand difficult subjects, giving students educational breaks, and offering an additional venue for learning. In addition, the author states that board games are beneficial to education in that they allow students to practice problem-solving skills, contribute to students' well-being, and help students learn to manage their feelings. The author uses all of these points to support her main statement that educational games are important in that they engage students and excite them about learning. This resource is targeted at teachers, educators, and anyone else interested in using educational games for learning. The article is well written, easy to read, and helpful in that it provides many valid reasons for using board games as educational tools – even if many of the author's statements are not backed up with research or evidence.

Philpot, J., & Peterson, C. (1998). Improving the investments or capital markets course with stock market specialist. *Financial Practice and Education*, 8(2), 118-124.

James Philpot, Assistant Professor at Ouachita Baptist University, and Craig Peterson, Associate Professor at Western Michigan University, wrote this article. The paper describes the authors' use of the board game *Stock Market Specialist* to introduce finance students to the work of the specialist in making a fair and orderly market for common stock. The authors first look at pedagogy and game essentials, and then they describe how they used the game. Teaching effectiveness of the game and student response are also discussed. The authors conclude that the game's "success as a pedagogical tool rests in its ability to elicit interest and connect a limited set of players actions to specific events or outcomes" (p. 123). This resource is relevant to researchers and educators interested in combining board games and pedagogy.

Pinder, P. J. (2013). Utilizing instructional games as an innovative tool to improve science learning among elementary school students. *Education, 133*(4), 434-438.

Written by Dr. Patrice Juliet Pinder (STEM Education Research Institute), this article primarily consists of a quantitative study that examines the effects of using instructional games in elementary school classrooms, an age group for which there is a current gap in the scholarly literature. Initially, this article introduces the topic and a brief view of the current literature. Then, two research questions are put forward: (1) is the use of game board activities effective or ineffective in improving the science performance and motivation levels of younger students? and, (2) is there a difference between grade K and grade 1 students' test score pre- and post-game application? The methods and results of the current study are described in detail, and the article concludes with a discussion of the results and recommendations for future research. This resource is primarily targeted at educators and scholars interested in using instructional games to improve science learning, particularly among elementary school students. However, the article contains useful information for anyone interested in utilizing games as learning tools.

Pittman, J., & Paul, C. (2008). Seeking fulfillment: Comparing role-play in table-top gaming and World of Warcraft. *International Journal of Role-Playing, 1*(1), 53-65.

In this article written by Jason Pittman and Christopher Paul, both from the University of Alabama, role-play in table-top gaming is compared with role-play in online games like *World of Warcraft*. After first describing some of the unique attributes and differences of each play method, the article looks at autoethnographic findings and survey results related to fulfillment according to various factors such as age, location, and gender. The article concludes that "role-players' preferences for on or offline play were driven by a

preference for the open-ended design of tabletop role-playing and a desire to meet a critical mass or role-players online at their own convenience” (p. 53). This resource is primarily relevant to those interested in the differences between tabletop role-play and online role-play, especially those interested in the demographic and autoethnographic information related to this.

Raczkowski, F. (2014). Making points the point – towards a history of ideas in gamification. In M. Fucs, S. Fizek, & P. Ruffino (Eds.), *Rethinking gamification* (pp. 140-160). Luneberg, Germany: Meson Press.

In this article, role-play in tabletop gaming is compared with role-play in online games like *World of Warcraft*. After first describing some of the unique attributes and differences of each play method, the article looks at autoethnographic findings and survey results related to fulfillment according to various factors such as age, location, and gender. The article concludes that “role-players’ preferences for on or offline play were driven by a preference for the open-ended design of tabletop role-playing and a desire to meet a critical mass or role-players online at their own convenience” (p. 53). This resource is primarily relevant to those interested in the differences between table-top role-play and online role-play, especially those interested in the demographic and autoethnographic information related to this. The article is well written and thoroughly researched. In addition, the article is organized well and contains several graphs from survey results.

Reese, C., & Wells, T. (2007). Teaching academic discussion skills with a card game. *Simulation & Gaming*, 38(4), 546-555.

This article describes a game used for teaching discussion skills to English as a Second Language (ESL) students. The game focuses on common phrases helpful for participating in seminar-style classes common to graduate school settings. The authors explain the rationale for choosing to teach skills using a game. They describe the procedures, benefits, and weaknesses of the game and students' experiences using the game. While this article is primarily targeted at teachers of ESL, it is also relevant to any educators interested in game-based learning.

Robson, K., Plangger, K., Kietzmann, J. H., McCarthy, I., & Pitt, L. (2015). Is it all a game? Understanding the principles of gamification. *Business Horizons*, 58(4), 411-420.

This article discusses the principles of gamification – the application of game design principles in non-gaming contexts – and how they can be used within a business setting. The authors define what gamification is and explain how it prompts managers to think about business practice in new and innovative ways. Various gamification principles are discussed, including the people involved, methods and mechanics, and gamification dynamics and emotions. Finally, the value of gamification is discussed. This resource is most directly relevant to business professionals and researchers interested in gamification trends and principles. The article is well researched and discusses the subject in depth.

Salmina, N. G., Tihanova, I.G., & Chernaya O.V. (2011). Creation of developing curricula using the board games. *Psychological Science and Education*, 2011(2), 55-61.

This article discusses the various benefits of playing board games to child development – including development of cognitive abilities, personality development, developing strategy, planning, etc. A sequence of work in the construction of developing curricula is

also developed. This resource is targeted at educators developing curricula which incorporate board games. The article is well organized and contains valuable information related both to developing curricula using board games. In addition, the article includes information on the benefits of using board games to teach children.

Schrier, K. (2014). *Learning, education, and games* (Vol. 1). Pittsburgh, PA: ETC Press.

Edited by Karen Schrier and written by members of the Learning, Education and Games Special Interest Group of the International Game Developers Association, this book examines the latest research and design techniques for creating and using games for learning. This is the first volume of a two book series – covering the topics of learning, education, and games. The first primary section of the book includes chapters on STEM (science, technology, engineering, and mathematics), computational thinking, history and social studies, literacy, music, physical education, emotional health, ethics, and 21st Century skills. The second section covers primary design and assessment considerations, concentrating on illustrating game design techniques in relation to educational needs. Each chapter is written by a different author and includes two to four case studies to illustrate the theories and findings in practice. This resource is targeted at researchers, educators interested in research and design techniques involved in using games for learning, and education. The book is adeptly researched, and each chapter provides valuable information on the topic.

Schweber, S. A. (2003). Simulating survival. *Curriculum Inquiry*, 33(2), 139-188.

Simone Schweber of the University of Wisconsin-Madison is the author on this article on survival simulations. This article describes a Holocaust simulation and the author's research on it. The author begins by giving background information on Ms. Bess – the

creator of the simulation – and her class at Gaucho High School. Then information is given on the course itself – an elective history course on World War II. The article outlines the set-up of the simulation, the process of the actual simulation and the reactions to the simulation. Finally, the class debriefing on the simulation is summarized and longer student reflections are discussed. This resource is most relevant to those specifically interested in simulations on survival or other sensitive subjects. The article is thorough on its subject, and is well written and organized. The greatest limitation of this article is simply that its topic is so specific and not as relevant to all educators interested in games and learning.

Selinker, M., Daviau, R., Earnest, J., Forbeck, M., Garfield, R., Howell, D., & Yu, D. (2011).

The Kobold guide to board game design. Kirckland, WA: Open Design LLC.

Selinker and the other authors provide a detailed and often systematic instruction on the design of board games. They include exposition of little known game mechanics that fascinate the authors and how to perform blind-play testing. The work illustrates the kind of pitfalls that can ruin a game's design and the sorts of interesting factors that can make it a success. The book focuses on practical applications and only delves into the theoretical when absolutely necessary, making it an easy read. The authors avoid getting bogged down in technical jargon which makes the work a valuable read to game designers, publishers, and average readers who are interested in the way games are designed.

Chapter Titles:

- The Game Is Not the Rules
- Play More Games

- Pacing Gameplay
- Metaphor vs. Mechanics
- Whose Game Is It Anyway?
- How I Design a Game
- Design Intitively
- Come on in and Stay a While
- The Most Beautiful Game Mechanics
- Strategy Is Luck
- Let's Make It Interesting
- Developing Dominion
- Thinking Exponentially
- Stealing the Fun
- Writing Precise Rules
- It's Not Done Till They Say It's Done
- Amazing Errors in Prototyping
- Everything You Always Wanted to Know About Prototypes
- Life's a Pitch
- Getting Your Name Published

Selvidge, E. (2006). Journey to Egypt: A board game. *Montessori Life*, 18(4), 36-39.

Ellen Selvidge, Director and teacher at Audubon Montessori Charter School, is the author of this first person account which discusses her experience in developing an educational board game for her classroom. The article begins by providing background information about the author's students' studies of Egypt, and how their sustained interest in the topic

gave her the idea to create an educational game on the subject, entitled *Journey to Egypt*. This article describes the process of making the game, modifications that had to be made to it after playing, and the educational goals for the game. The author concludes by stating that though the experience was challenging, it was also very rewarding. This resource is especially relevant to educators who are interested in creating original educational games for their classrooms. The article contains detailed information in the process of creating the game, as well as examples of possible troubles and proposed solutions. While little outside research is included, this account of the author's own experiences is still valuable and well written. This article also contains the full instructions to *Journey to Egypt* as an additional resource.

Shameem, N., & Tickoo, M. (Eds.). (1999). *New ways of using communicative games in language teaching*. Alexandria, VA: TESOL.

This article describes 94 classroom games designed to teach communicative skills in English as a second language. These games allow students to use communication strategies in English in realistic situations similar to those in which they would use their native language. An introductory section outlines the rationale for the use of games in communicative second language learning, the method used for selecting the tasks and activities presented, and the goals of communicative activities. Subsequent sections detail activities in five categories: learning communication strategies (asking questions, negotiating, pronunciation); learning content material (guessing words in context, developing reading skills, cultivating writing skills, establishing speaking skills); learning from one another (enriching vocabulary and productive vocabulary use, imparting and seeking factual information, confirmation and clarification, expressing emotional

attitudes); developing skills in discourse (conducting interviews and conversations, collaborative storytelling in spoken and written forms, grammar in discourse); and developing fluency (review and revision, developing fluency with known vocabulary, capitalizing on content, sharpening speaking skills, working with writing). Information provided about each activity includes targeted class levels, instructional aims, class time, preparation time, materials needed, procedures, caveats and options, references and further reading, and the teacher-contributor. This resource is targeted at ESL teachers, though it is useful for any English teacher who is interested in using games in language teaching.

Sheldon, L. (2012). *The multiplayer classroom: Designing coursework as a game*. Boston, MA: Cengage Learning.

Lee Sheldon, in *The Multiplayer Classroom*, attempts to counteract decades of rote standardization in the American educational system through a radical shift in educational philosophy. Building upon the foundation of multiplayer and role-playing games, Sheldon uses case studies to contend that education can be dramatically improved through his paradigm. While the book primarily uses digital game terminology, it does not require an extensive knowledge of video games or even advocate the purchase of digital games. *The Multiplayer Classroom* focuses on intrinsic motivation, which is the primary problem faced by gamification in education. Sheldon argues that educators can build upon this model and continue to improve and enhance its overwhelming qualities. *The Multiplayer Classroom* is an excellent read for any educator who is interested in utilizing gamification in their classrooms.

Chapter Titles:

- “Good Morning. You All Have an F.”
- Games in the Classroom
- Theory and Practice of Game Design Syllabi
- Theory and Practice of Game Design Class
- Marked Tree High School
- Multiplayer Game Design Syllabi
- Multiplayer Game Design Class
- University of Arizona South: Teaching with Technology
- Introduction to Game Design Syllabi
- Introduction to Game Design Class
- Louisiana State University: Introduction to the Story of Education
- Designing Interactive Characters Syllabi
- Designing Interactive Characters Class
- Valencia Community College: United States History to 1877
- Identifying Learning Objectives and Student Needs
- Robert Louis Stevenson Middle School: General Math
- Student Demographics
- Texas Tech University: History of Higher Education In the United States
- How Games Are Designed
- Ohio Valley College of Technology: Introduction to Keyboarding & Business Writing, Introduction to Computers
- Production
- Playing the Game

- Waunakee Community High School: Computer Science Classes
- Designing the Future
- Resources
- Appendices

Sheldon, L. (2014). *Character development and storytelling for games*. Boston, MA: Cengage Learning.

Lee Sheldon is the author of this book on character development and storytelling for games. This book discusses how to create games that are rich with character, plot, and narrative drive. The author discusses the many types of games and how each type presents its own challenges and opportunities for writers. This book teaches readers to tap into their creative instincts and construct stories that are meaningful and evocative. Several aspects of character development and storytelling for games are discussed – including background, creating characters, and telling the story. In addition, the book contains a section on games people play today and a section of reflections. The book is targeted at game creators, specifically those who want to tell stories through games. The book provides comprehensive information on the subject, and it is well written and enjoyable to read.

Shubik, M. (2002). The uses of teaching games in game theory classes and some experimental games. *Simulation & Gaming*, 33(2), 139-156.

Martin Shubik, professor of Mathematical Institutional Economics at Yale University, wrote this article. The author discusses the purpose as well as the pros and cons of games in teaching – focusing especially on using games in the study of game theory, experimental games, and games in classrooms. The article then discusses the results from

several games that have been published and reported on in detail – *Prisoner’s Dilemma*, *Battle of the Sexes*, and *Chicken*. Each of these games qualifies as an abstract game, where the story line is not relevant. Psychological considerations of games in learning are also discussed. Finally, the author concludes with a summary of the positive uses of games for teaching and research, stating that “the use of gaming in teaching can come at a cost of less than zero because it can be an effective teaching device and can yield experimental insights as part of a joint product in the classroom” (p. 155). This article is targeted at those interested in using games in using games in classes – especially game theory classes. The article is well researched and written – even though the focus of the article is slightly scattered.

Sibold, C. (2011). Building English language learners' academic vocabulary: Strategies and tips. *Multicultural Education*, 18(2), 24-28.

This article introduces the Three-Tier Model of Beck, McKeown, and Kucan, which states that when it comes to language instruction, the distinction between academic vocabulary words and content specific words has a significant bearing on the language success of English Language Learners (ELLs). In this article, the author describes strategies that give teachers and parents the means to develop ELLs' vocabulary through reading, direct instruction, and reinforcement activities and games. This resource is relevant to English language learners or educators, especially those who are interested in using games to enhance learning.

Siegler, R. B. (2008). Playing linear numerical board games promotes low-income children's numerical development. *Developmental Science*, 11(5), 655-661.

Robert S. Siegler and Geetha B. Ramani – both from the Department of Psychology at Carnegie Mellon University – are the authors of this article on how playing linear numerical board games promotes the numerical development of low-income children. Initially, the authors introduce the topic by discussing how the numerical knowledge of low-income children is less than that of those from middle-income backgrounds. The authors then proceed to outline the study that forms the basis of this article. This study consists of two experiments – the first of which “examined the initial numerical estimates of low-income and middle-income preschoolers” and the second of which “examined the effects of playing linearly arranged, numerical board games on low-income children’s representations of numerical magnitude” (p. 656). This article describes both the methods and results of each experiment in detail. Based on the results of these experiments, the article concludes that while four-year-olds from low-income backgrounds have less knowledge of numerical magnitudes than those with more affluent backgrounds, providing children with linear numerical board games eliminates this difference in numerical estimation proficiency. This resource is aimed at psychologists, but it is also very relevant for teachers and educators. Extensively researched and well written, this article provides solid evidence for the benefit of linear numerical board games for young children. Though readability is limited due to the prolific use of mathematical terms, the main premise and conclusions of the article are easy to understand.

Siegler, R., & Ramani, G. (2009). Playing linear number board games – but not circular ones – improves low-income preschoolers’ numerical understanding. *Journal of Educational Psychology, 101*(3), 545-560.

Written by Robert Siefler, Carnegie Mellon University, and Geetha Ramani, University of Maryland, this article analyzes studies that indicated that playing linear number board games should enhance preschoolers' numerical knowledge and ability to acquire new numerical knowledge. The authors also describe their own study, which tested this hypothesis, while also examining whether playing the board games produced greater learning than engaging in other types of numerical activities. The research method, materials and procedure, and results are all discussed. Finally, the authors discuss further implications for arithmetic learning, and conclude that their study confirms the representational mapping hypothesis. This article is targeted specifically at educators of preschoolers. The studies outlined in this article are well developed and described, and plenty of research is included. While the article is not geared specifically to those interested in games and learning, it is still an interesting and informative read for that demographic.

Simkins, D. (2015). *The arts of LARP: Design, literacy, learning and community in live-action role play*. Jefferson, NC: McFarland & Company.

The Arts of LARP is an extensive ethnographic examination of Live Action Role-Playing based on a six-year study of the game play itself. David Simkins found an insightful use for LARP, which at its heart is a storytelling exercise. Simkins argues that LARP has great potential to be used as a way of practicing classic literacy for those with disabilities that make writing difficult. While LARP does not fit within the traditional understanding of literacy proficiency, its primary function is to improve storytelling and by extension the story writing abilities of the participants. Additionally, Simkins explains that LARP itself is a new literacy practice that include community strategizing, advanced planning,

understanding story plots as well as story arcs. The book argues for LARP as a tool for future Empathy Studies to help promote a stronger sense of empathy to prevent “bystander apathy” (p. 170). Simkins concludes that LARP should continue to be studied for possible use in other areas of the US educational system. The work is technical, directed primarily to educators and researchers. It can be difficult to read at times, however, the overwhelming quality of the work places it at the core at the study of games and play.

Chapter Titles:

- What Is Live-Action Role Play?
- A Definition of Role Play
- Role Play as a Tool For Learning
- Story
- Rules
- Environment
- Play
- Character
- World
- Theme
- LARP as a Literary Practice
- LARP and Empathy
- Critical Ethical Reasoning
- Uses of Technology in LARP

Smith-Robbins, S. (2011). “This game sucks”: How to improve the gamification of education.

New Horizons. Retrieved from <http://er.educause.edu/articles/2011/2/this-game-sucks-how-to-improve-the-gamification-of-education>

Sarah Smith-Robbins, Director of Emerging Technologies at the Kelley School of Business at Indiana University, is the author of this article on how to improve the gamification of education. The author begins by describing gamification – both how it is used in everyday life, and how it is used in academia. Then, the author describes what makes a game and remarks on how the higher education system is currently either a very weak game or a misunderstood point system. Finally, the author proposes how to improve the “game” of education. This resource is targeted at educators and those actively involved in higher education. While the subject of board games in learning is not discussed, the concept of academia as a game in itself is clearly covered.

Stark, L. (2012). *Leaving mundania: Inside the transformative world of live action role-playing games*. Chicago, IL: Chicago Review Press.

Lizzie Stark dives headlong into the world of Live Action Role-Playing or LARPing and takes the readers along for the journey. In an engaging manner, Stark provides an interesting narrative filled with the unique characters who play games without miniatures or boards, but rather with themselves. Stark helps to reveal the communal nature of LARP and how it provides a bond that transcends the games themselves, which Stark demonstrates repeatedly in her profile chapters that examine the stories of individual LARPer themselves. Stark shows how LARPing is very similar to historical reenacting and how some LARPer even are historical reenactors themselves. *Leaving Mundania* also connects LARPing to modern US Military training methods that use a realistic role-

playing to help prepare their men for the rigors of combat. Stark concludes that LARP is a “rich and complex hobby” like many others. The work is a pleasant read for any who wish to better understand LARP through authentic narratives of the lives of LARPer themselves.

Chapter Titles:

- The Expert and the Noob
- Growing Up Gamer
- Queen Elizabeth, Larper
- The King of Make-Believe
- The Adventures of Portia Rom
- Closeted Gamers and Satanic Panic
- The Unwritten Rules
- Playing War
- Larp as a Training Tool
- Larpapalooza
- Cthulhu Fhtagn!
- A Week in Denmark
- Knudepunkt Blew my Mind
- Epilogue

Starlit Citadel. (2015). Retrieved from

<https://www.youtube.com/channel/UC8kPXWmQIhKRcQu2oLi0Tyg>

Starlit Citadel is a web series that focuses on the mechanics and rules of board games.

Each episode describes one episode in which a board game will be explained and a

verdict on whether or not the hosts of the show would recommend the game. *Starlit Citadel* is hosted by Kaja Sadowski and Joanna Gaskell who provide an easy to follow description of the games in short segments for gamers considering the featured game. It is published by a game store of the same name based out of Vancouver, Canada. The series is very watchable and provides excellent input on the desirability as well as the audience of any given game.

Stokes, B., Walden, N., O'Shea, G., Nasso, F., Mariutto, G., & Burak, A. (2015). *Report #1: Impact with games – A fragmented field*. Pittsburg, PA: ETC Press.

This article introduces a discussion on games and their impact, specifically focusing on how fragmentation has been harmful to the field of games. This report gives five basic claims about how the field is currently fragmented and also establishes a foundation for more systematic solutions. The authors conclude this report by discussing how they plan to unify the field. This resource is targeted at researchers and other members of the field of games. This article is meant as a report to be read by any involved in the field, in order to discuss the problem of fragmentation and initiate a conversation to solve it.

Sugar, S. (1994). My first game: The Ms. Bonnie episode. *Simulation & Gaming*, 25(2), 258-261.

Stephen Sugar of The Game Group wrote this article. Sugar's primary academic interests include game theory and gaming for experimental, operational and teaching purposes. In this article, Sugar writes about his first experience creating an original board game for teaching in his college classroom. The game he recreated was *Monopoly* style, and it involved receiving chips in exchange for answering questions based on class material. Sugar recounts the entire first experience and how the game captured the attention of his

student, created interaction between the players and material, and resulted in even the most stoic students becoming enthusiastically involved. To conclude, Sugar states that in order to have successful learning experiences with games, “there must be a structure to any playful endeavor – and introduction and climate setting, a chance to play, and a postgame debriefing to allow the student to internalize the game’s learning material” (p. 260). This resource is useful for educators interested in incorporating board games in their classrooms. The article provides interesting observations, introduces potential problems, and describes the benefits of education through gaming.

Sugar, S., & Willet, C. (1994). The game of academic ethics: The partnering of a board game. *To Improve the Academy*, (Vol. 13). Fort Collins, CO: The Professional and Organizational Development Network in Higher Education.

Stephen Sugar and Carol Willet are the authors of this article on creating a board game to teach academic ethics. The paper recounts the process in which two developers created a game - *A Question of Academic Ethics* – in order to teach this. One developer served as game writer and the other served as content expert. This article describes the difficulties and dilemmas of each developer. Then, the article describes the game and how it was used to teach academic ethics. Finally, the results of the study in which the game was used were discussed, with the conclusion that the game was a success. This article is useful to anyone interested in using board game for learning, though it is especially relevant to those teaching academic ethics. The article is well written, and the process of creating and testing the game is recounted in detail.

Swiderska, N., Thomason, E., Hart, .A, & Shaw, B. (2013). Randomised controlled

trial of the use of an educational board game in neonatology. *Medical Teacher*, 35(4). 413-415.

The authors of this article are from the Liverpool Women's Hospital and Lancaster Medical School. The article describes a small study that was conducted to investigate whether an educational board game developed in the specialty of neonatology could influence the learning experience of medical students during their neonatal attachment. The article first introduces the term neonatology, and then describes the process of developing the game, its basic rule, and the process of conducting the study itself. From the study, the authors conclude that while the students enjoyed the game and felt it was beneficial, further studies would need to be conducted to determine if the game has an immediate effect on learning. The article is targeted at educators and medical students interested in the role of games and learning. The authors described their study well, though more research needs to be done to produce more precise and significant results.

Tabletop. (2015). Retrieved from

<https://www.youtube.com/channel/UCaBf1adpIsw8OxqH4ki2Kg>

Tabletop is a web series about board games, hosted by Wil Wheaton, and published by Felicia Day and Wil Wheaton on Felicia Day's Youtube channel "Geek and Sundry." Each *Tabletop* episode focuses on one board game. Wil Wheaton begins each episode by giving a simple explanation of the rules and the mechanics even when the game in question is quite complex. Additionally, *Tabletop* provides an entertaining video of various guests playing with/against Wil Wheaton to give a more concrete example of how the game is played. *Tabletop* gives no recommendations for the purchase of any given game; instead, it is assumed that every game featured in an episode of *Tabletop* is

endorsed for other gamers. This web series won the Diana Jones Award for excellence in gaming in 2013.

Tinsman, B. (2008). *The game inventor's guidebook: How to invent and sell board games, card games, role-playing games, and everything in between*. Garden City, NY: Morgan James Pub.

Brian Tinsman attempts to create a paperback sidekick for potential game designers in *The Game Inventor's Guidebook*. The book begins with a series of biographical sketches of famous game inventors that add color at the beginning of the work. It has an excellent flow, replete with humorous anecdotes that prevent the audience from getting bogged down in technical details. Tinsman investigates both paths for game design, through an established publisher and through the path of self-publishing. He includes many helpful ideas for presenting and selling a game. In the back, it includes a list of game publishers, brokers, and other helpful resources. Generally, *The Game Inventor's Guidebook* is a helpful resource for would-be game designers; it also provides excellent insight for those who wish to understand what the inventor's go through to provide them with the games they enjoy today.

Chapter Titles:

- Trivial Pursuit
- Magic: The Gathering
- Dungeons and Dragons
- The Pokemon Trading Card Game
- Interview with an Inventor
- Interview with a Publisher

- What's In It for You?
- How New Games Happen
- Anatomy of a Publisher
- Markets for Games
- Mass Market Games You Should Know
- Mass Market Companies You Should Know
- Hobby Games You Should Know
- Hobby Game Companies You Should Know
- American Specialty Games and Companies You should Know
- European Games, Companies, and An Award You Should Know
- What Am I Getting Into?
- Before You Print
- After You Print
- How to Invent a Game
- Game Design
- Game Development
- Targeting Publishers
- Before You Submit
- Eight Submission Strategies
- Contacting Publishers
- Protecting Your Property
- What to Do if They Don't Say Yes
- What to Do if They Say Yes!

- The Game Industry's Dirty Little Secret

Torner, E., & White, W. J. (2012). *Immersive gameplay: Essays on participatory media and role-playing*. Jefferson, NC: McFarland & Co.

Torner and White use a collection of essays to explore how role-playing games influences society, culture, and psychological states of the players themselves. While the structure of the work prohibits any sort of continuity throughout the body, the essays are thought provoking and well written. The essays address a wide range of intellectual questions, from the representation of the Nazis in video games to Jungian theory in role-playing games. The academic purpose of *Immersive Gameplay* is evident and it is not intended for the faint of heart. However, for the well-educated reader it is an enlightening discourse. It is an exemplary read for anyone who wishes to go beyond the surface discussion surrounding games and into the more difficult discussions that swirl beneath the surface.

Chapter Titles:

- First Person Audience and the Art of Painful Role-Playing
- Jungian Theory and Immersion in Role-Playing Games
- Circles and Frames: The Games Social Scientists Play
- Role-Playing Communities, Cultures of Play and the Discourse of Immersion
- Gary Alan Fine Revisited: RPG Research in the 21st Century
- The Agentic Imagination: Tabletop Role-Playing Games as a Culture Tool
- *Kid Nation*: Television, Systemic Violence and Game Design
- *Survivor* Meets the Hero's Journey: Connecting Mythic Structures to Reality Television

- A Game About Killing: Role-Playing in the Liminal Spaces of Social Network Games
- Deleting Memory Space: The Gaming of History and the Absence of the Holocaust

Torres-Roman, S., & Snow, C. (2014). *Dragons in the stacks: A teen librarian's guide to tabletop role-playing*. Santa Barbara, CA: Libraries Unlimited.

Dragons in the Stacks demonstrates how libraries can incorporate RPGs (Role-Playing Games) into their regular library programming to serve their patrons and better facilitate the learning of teens. It focuses on the teenage demographic, however, the authors' extensive work not only allows outreach to a wider audience, but they openly encourage it. The book delivers a brief history of the RPG development that provides readers a foundation to understand the games themselves. It also clearly explains how to catalog more unusual elements of RPG play within the library system, and explains the benefits of and the rationale for incorporating RPG play into existing library programming.

Dragons in the Stacks includes an extensive guide to RPG games that includes descriptions of numerous up-to-date games, as well as an index which makes referencing quite easy. Overall, it is an exceptional book for any library interested in incorporating games into their regular programming.

Chapter Titles:

- Let Me Tell You of the Days of High Adventure!; or, A Very Brief (And Admittedly Incomplete) History of Tabletop Role-Playing Games
- Selection and Collection Development
- Cataloging
- Programming

- A Guide to Games

Townsend, D. (2009). Building academic vocabulary in after-school settings: Games for growth with middle school English-language learners. *Journal of Adolescent & Adult Literacy*, 53(3), 242-251.

This article presents an overview of several games and activities that teachers can use in after-school settings to help middle school English as a second language students increase their academic vocabularies. A discussion of the role that an increased academic vocabulary can play in helping students to access to academic texts and increase their literacy levels are also presented. A definition of academic vocabulary and a discussion of its importance in the education of English as a second language students are offered at the end. This resource is valuable for ESL teachers and middle school instructors who are interested in using games in their classrooms.

Treher, E. N. (2011). Learning with board games: Play for performance. *The Learning Key*, 1-10. Retrieved from

www.thelearningkey.com/pdf/Board_Games_TLKWhitePaper_May16_2011.pdf

This article, written by Elizabeth N. Treher, Ph.D., makes the argument that board games are an effective learning tool that should be used in educational settings to promote learning. The author discusses several prevalent myths and beliefs about learning and explains why they are not true. Then, learning through board games is discussed in detail – including benefits and research on board games. Finally, examples of board games (including *The Learning Key*) are introduced and discussed. The author concludes with a recapitulation of the value of board games for learning and a call to challenge the current bias in many educational settings against using games in order that their many

educational benefits are made known. This resource is targeted at any educators or researchers interested in the value of board games for learning. The article is well written and researched and contains a plethora of valid reasons why board games should be used in education.

Tresca, M. J. (2011). *The evolution of fantasy role-playing games*. Jefferson, NC: McFarland & Co.

Michael Tresca attempts to educate the public on the rise of the RPG and provide a positive presentation of the amount of fun RPGs provide to the players. Tresca repeatedly refers to his own gaming experiences as well as those of his friends throughout the work. The inclusion of pictures also appears to enhance the broad appeal of the work itself. Tresca provides a good narrative of the transformation of the role-playing games from their earlier elements to the massive multiplayer online games and live action role-playing that dominate today. Tresca provides a broadly appealing book with very little to confuse the reader. The book is primarily for the average reader who knows very little about role-playing games of any type.

Chapter Titles:

- The Lord of the Rings
- Collectable Card Games and Miniature Wargames
- Tabletop RolePlaying Games
- PlayByPost and BrowserBased Games
- Gamebooks and Interactive Fiction
- MultiUser Dungeons
- Computer RolePlaying Games

- Massive Multiplayer Online RolePlaying Games
- Live Action RolePlaying Games

Wardrip-Fruin, N., & Harrigan, P. (Eds.). (2007). *Second person: Role-playing and story in games and playable media*. Cambridge, MA: MIT Press.

Wardrip-Fruin and Harrigan edit numerous individual essays that address various issues such as the development, execution, and theory behind the role-playing games that dominate the second-person game world. *Second Person* incorporates tabletop, computer, console, and live action role-playing games within its expansive scope. The most dominant question concerning role-playing games is, “are role-playing games primarily story telling devices or are they simply a type of game play?” The authors continually wrestle with this question throughout the work. Additionally, the book addresses whether role-playing games can be used for educational purposes. The flow tends to change dramatically depending on the essay in question. Although it lacks continuity, *Second Person* is an excellent addition to the literature that addresses the primary questions educators have concerning role-playing games and their relationship to education.

Chapter Titles:

- Tabletop Systems
- Computational Fictions
- Real Worlds

Wernert, S. (2013). No child left behind comes to college: The implications of limiting early age play on incoming college students. *Academic Advising Today*, 36(3), 1-4.

Written by Sean Wernert, faculty academic advisor at the University of Notre Dame, this article discusses the implications of limiting play in early childhood on incoming college

students. Wernert discuss the importance of childhood play in various areas of development, including social, emotional, and cognitive. However, Wernert states that due to many parents and schools phasing out free play to give more direct instruction, the development of their children is altered – particularly in the area of developing adaptive behaviors. Wernert goes on to discuss how this impacts college students as they attempt to adapt to college life, as well as offering suggestions for helping students better connect and adapt. This article is targeted at academics and educators, particularly those interested in play and its role in psychology. The ideas expressed in the article are well formulated, though suggestions for improving the proposed problems are only briefly mentioned.

Wideman, H. H., Owston, R. D., Brown, C., Kushniruk, A., Ho, F., & Pitts, K. C. (2007).

Unpacking the potential of educational gaming: A new tool for gaming research.

Simulation & Gaming, 38(1), 10-30.

The authors of this article are researchers from York University, University of Victoria, and Seneca College. The article looks at educational gaming as a new tool for gaming research. In particular, it looks at rationales for educational gaming, including situated experiential learning, game attributes and motivation, and communities of practice and the development of expertise. Next, the authors explore the current state of educational gaming and the associated research findings. Finally, methodological issues in gaming research are addressed, and a tool for resolving those issues is introduced and discussed – the virtual usability laboratory. The authors conclude with a discussion of the field test results on the virtual usability laboratory and its potential to be more fully developed.

This resource is relevant to those interested in gaming research and gathering data related to evaluating the educational efficacy of games. The article is extensively researched and well written. While this article does not spend much time discussing the actual benefits of gaming to education, it looks in depth at the current state of educational gaming, as well as the data, research, and evaluation methods associated with such gaming.

Willoughby, S. E. (1993). Card game activities using grammar-based dialogues. (Master's Thesis). (ED370355). Retrieved from <http://eric.ed.gov/?id=ED370355>

This paper outlines a practicum project to develop instructional card game activities for students of English as a second language (ESL). The materials used consisted of one deck of picture cards and 46 grammar-based card activities. Students were instructed to practice dialogue in small groups of three to five students, while playing one of three familiar American card games. The focus was on repetitive oral production of specific grammar-based language structures in a controlled but interesting situation, and the goal was to help learners gain confidence in speaking English and feel successful as language learners. This is a useful resource for educators (specifically ESL teachers) who are interested in using games in their classrooms. While this paper uses card games as a specific example, the same principles could apply to analog games of any kind.

Vazirabad, A. F. (2013). The use of games to foster fluency among ESL learners. *International Education Studies*, 6(4), 205-216.

This article outlines a study that focused on several communication strategies. The aim of this study was to investigate the link between the games for fostering fluency among ESL learners. The authors outline the study in detail and then provide the results, which reveal that the use of games for fostering fluency in English led to overwhelmingly positive

results. This resource is useful for educators (particularly ESL teachers) who are interested in using games in their classrooms. The paper is well written, and the study serves as an excellent example of the use of games for fostering fluency among ESL learners.

Woods, A. (2011). Music board game workshop review. *American Music Teacher*, 58-59.

Written by Autumn Woods, this review provides a summary of the book *Music Board Game Workshop*, by Eric Branscome, and contains information about the author. The review also includes information on the field of music education and how board games can benefit that field. The review also includes a list of contents of the book. This resource is meant as a review of this specific book, for those who may be interested in it – primarily, music educators interested in using board games to teach. The review is short, but it adequately describes the book and its contents.

Woods, S., (2012). *Eurogames: The design, culture, and play of modern European board games*.

Jefferson, NC: McFarland & Company, Inc., Publishers.

Eurogames offers a precise historical and sociological examination of modern European board games as well as the reasons behind the gameplay itself. Stewart Woods provides insight through interviews with the gamers themselves about their preferences in game design, game play, and their broader ideas about the issues of hobbyist game play.

Additionally, *Eurogames* provides a smooth exposition about the transition of hobby games from serious war simulations to the wide-ranging games available today. Woods explains game design from the perspective of the end user. He generates an order of importance that demonstrates the value of various facets of game design. The book makes ideology, history, and play theory accessible to the reader while avoiding the stilted

writing style of many of its peers. *Eurogames* provides excellent resources to educators, designers, and publishers while retaining an admirable flow that lends itself to general readers who lack the professional commitment to the subject of games.

Chapter Titles:

- A Brief Introduction to Hobby Games
- Anglo-American Hobby Board Games 1960-1995
- Gesellschaftsspiele – Gaming in Germany
- From German Games to Eurogames
- The Eurogame Genre
- Hobby Gamers
- The Pleasure of Play
- Goals and Outcomes in Social Play
- An Act Apart?

Yoon, B., Rodriguez, L., Faselis, C., & Liappis, A. (2014). Using a board game to reinforce learning. *The Journal of Continuing Education in Nursing, 45*(3), 110-111.

The primary author of this article is Bona Yoon, Health Science Specialist at Veterans Affairs Medical Center. This article looks at how board games have been used as educational tools in health care settings – “to review core concepts, disseminate new information creatively, and boost teamwork while making learning more enjoyable” (2). The authors specifically look at a board game they created called *Foley-opoly* – a urinary catheter-themed board game. This article describes the board game design and implementation, and provides a summary of the curriculum in which it was used. This resource is targeted especially at nursing students and educators who are interested in

using board games for learning. The article, though concise, is well written and thoroughly researched. However, this resource only introduces and describes the one game, and does not go into more depth on the subject.