The Influence of Graphic Novels on Modern Literature

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ABSTRACT

Genetic testing has emerged as a critical tool in modern medicine, providing insights into inherited disorders, disease predispositions, and personalized treatment plans. Despite significant technological advances such as next-generation sequencing and expanded variant analysis barriers persist in terms of equitable access, interpretive accuracy, and regulatory consistency. This paper examines the historical development, current methodologies, and transformative technologies in genetic testing, emphasizing the dual imperatives of accessibility and accuracy. By evaluating ethical, infrastructural, and regulatory challenges alongside telehealth and data standardization opportunities, the paper outlines strategies for optimizing test reliability and reach. The integration of bioinformatics, global collaboration, and patient-centered frameworks holds promise for democratizing genetic testing and ensuring its safe, effective use in clinical and public health contexts.

Keywords: Genetic testing, next-generation sequencing, genomic medicine, accessibility, accuracy, telehealth, bioinformatics.

INTRODUCTION

Scholars in various disciplines across the world have renewed their interest in comics and graphic novels, both as objects of study and as tools for invoking learning and literacy. Media scholars have considered the value and implication of comics not only as a cultural artifact that reflects social and historical contexts, but also as a mode that remains a viable vernacular in the digital age. Educators, on the other hand, have been exploring how graphic novels can be used to enhance students' learning or social-emotional skills. For instance, in these pages of English Journal, the articles have featured Notebooks that call to attention how and why graphic novels can be used in the classroom as a way to engage students in reading and writing. They are only further evidence for the growing prevalence of graphic novels in the classroom canon. Despite pedagogical ideologies that underpin successful practice and scholarship on specific texts, genres, and target populations, literature assessing the impact that a nascent national trend like graphic novels has on the field of English education remains elusive. The most salient reason for using graphic novels in the classroom is the capacity to engage, foster, and provoke multiliteracies: the texts are a bridge for use in developing diverse literacy skills, and in forging connections between new and traditional modes of learning. Literacy experts have long asserted that the knowledge and skills required to read graphic novels are as sophisticated as those employed in reading traditional school-based texts—if not more so. This new affinity for incorporating students' out-of-school literacy practices is one of the central trends in contemporary literary learning. In the aftermath of a period of post-structuralist theorizing in literary studies, and in light of a growing focus on the cultural politics of space, place, and performance, pedagogy has gone global and has opened up to non-canonical or "peripheral" texts from and about other cultures. Comics are one type of the multiple modes identified for classroom use, and certainly of the most appealing to students [1, 2].

Historical Context of Graphic Novels

Graphic novels comprise words and pictures presented to the audience in a sequential format to narrate a story. They depict a variety of topics, some brilliantly illustrated and engaging, and others a bit wordier and less appealing. Containing fiction and information, graphic novels impact literary studies and other disciplines. They are a medium, not a genre, and are written in many styles using varied illustrations and formats. Graphic novels share concepts with traditional fiction but are generally larger, often in color

throughout to enhance the presentation of characters, events, and conclusions. They depict non-fiction subjects, emerge from newspaper comic strips to trade books, and appeal to children, adolescents, and adults. Alley Oop, Tarzan, and Little Orphan Annie started in the early 1900s, with the first funnies colored by Toulouse-Lautrec. In the 1930s, comic books emerged as compilations of comic strips in magazines. Hugo Gernsback, publisher of Amazing Stories, began an anthology of strips depicting Buck Rogers in the 1928 version of the comic book format. Competition prompted historical fiction with funny animal variants in black and white, subsequently colored entirely with continuing story characters. Regardless of the concept, strips were organized into twelve to fifteen editions for syndication, were immediately revised for compilation, and later captured on 16-millimeter nitrate film in the 1930s. Television animated the stories, and through marketing and licensing, toys and games were gold mines. Graphic novels, novel-length works employing illustrative techniques original to comics, emerged in the 1970s through the use of mature themes not allowed in comic books, formats printed in color quality equal to or better than the books found on the best-seller lists, hardcover collections of previously published strips, and collectibles [3, 4].

Defining Graphic Novels

'Graphic novel' is a term coined by in his small press magazine. The term was an attempt to label something beyond 'comic books' or 'comics'. Others have argued that the term refers to a type of comic book similar to book-length novels, citing works like, and Whereas comic books are usually in a magazine format and may be collected into one volume, a graphic novel is usually book-sized, bounded, and printed on high-quality paper. Graphic novels have various content, including adaptation of novels, long narratives with more than one story-arc, and one-shot long story with no sequel. In the English-speaking world, the term graphic novel surfaced several times independently. In 1964, the comics publisher, writer, and critic used the term in a letter to a fellow comics fan. The form was facetiously defined as "a long comic book in which the book is more important than the comic," a somewhat awkward phrase that attempted to say something about a type of comics without using the now pejorative terms, "comic book" or "comics." Additionally, adult comic book was no longer used after this choice of term. Many works thought to have been graphic novels were published in the nineteenth century. The publication of comic strip collections took the form of books in the 1890's. Works specifically in novel form employing sequential illustrations as integral to narrative appear to have surfaced in France in the 1930's. The use of the term graphic novel in the 1970's is ironic in that, while the products were distinct from previous ones in content, format, and design, champions of this new genre could not find new term to describe it. Paradoxically, while the term graphic novel helped stimulate thoughtful reading, the format itself facilitated thoughtless consumption [5, 6].

The Rise of Graphic Novels in Popular Culture

Though comics have been published and distributed in nations around the world for over a century, the graphic novel as a clearly defined form and entity has only recently achieved recognition. Illustrations paired with text tell stories or recount historical events in cultures as far apart as China and Italy, and the very first illustrated books were beloved by adult audiences. However, it was not until the mid-1980s that any works addressed exclusively to an adult audience with nothing but comics content were published in the United States. This absence and sudden presence are all the more remarkable considering the rapid rise of comics' acceptance in other media, in literature (particularly children's literature), and some art circles. Even more surprising was how the redefinition of comics took place in American culture. The very essence of the medium was debated, with one group insisting on a narrow definition that emphatically excluded anything not characteristically genre based, while the other camp asserted that reviewers needed to abandon preconceived notions of 'what comics are'. Works such as Raw, Eightball, and Love and Rockets featured surrealism, slice-of-life, magical realism, foreign lands, experimentation with text and layout, and themes of sex, family, friendship, and sexuality, and were only sporadically reviewed in the New York Times. With very few exceptions, comics had been regarded as entertainment for children and childish grown-ups. Those scholars working on comics lamented the absence of the medium in the field of Literature. At the end of the 1980s, newspaper comic strips, comic books, animated television shows, and the cult of the superhero dominated the public awareness of comics in the US [7, 8].

Graphic Novels Vs. Traditional Literature

Graphic novels are commonly derided by traditionalists as mere comic books, along with other forms of so-called popular literature. Graphic novels often present something to the interested reader which is very high serious indeed, however widely they may be circulated and however unlikely linguistically. Thus, it may be doubts about the seriousness of study in such forms of writing that endorses their exclusion. Their inclusion with, for example, traditional forms of narrative would seem to risk

incredibilities unless definitions were sharper. However, it is at least worth pointing out how very many forms of story are distributed through graphic novels in the current cultural milieu. Graphic novels build on and further develop the established genre of comic books. The preference for the term "graphic novel" rather than "comic book" is in part political. Within the comic book industry, there has been a long-standing effort to cultivate a more artisanal image for comic books, helping propel the graphic novel as a preferred term for longer works. This advocacy has been so effective that even those who reject the "graphic novel" designation may find in that label a more familiar or acceptable thing to describe the wildly divergent forms of storytelling inhering in the graphic novel. Nonetheless, there is something to the designation 'graphic novel.' In an Author's Note in the collected first Story by Soderbergh, 'the events depicted here are entirely true' asserts Smith. Here, the reader becomes aware of the author's concerted effort to dramatize events. Smith's flush, graceless depictions of characters gain gravity as depictions of real-life figure from the blurry barrier between truth and fiction, here now, but fantastical and wild in panel form. In the later-evolved texts of this cycle, this division becomes increasingly impossibly blurred by Sayles storytelling through Smith use of surreal forms and timelines. How fragile the boundary between fact and fiction might become in advanced narrative form of graphic novels is also challenging given parallels with weaker comic equivalents [9, 10].

Narrative Techniques in Graphic Novels

The novels of today utilize both words and images, notably in the form of graphic novels, which blend narrative and illustrations in a comic-book format. This genre gained popularity in the twenty-first century, although its roots trace back to earlier publications in Japan and Europe. The U.S. saw its first graphic novels in the late 1970s, with best-sellers emerging in the 1980s that earned critical acclaim for their literary and artistic merit. By the 1990s, these works began to be analyzed in academic contexts, leading to a surge of literature focused on graphic novels. Graphic novels are defined as "book-length comic" narratives, presenting stories that include both written text and images. They feature standard elements of prose novels—plots, characters, and settings—while also employing distinct comic book styles, including panels, dialogue balloons, and sound effects. Unique to graphic novels are their transmedia narrative techniques, which utilize the specific properties of the medium to tell stories in innovative ways. Scholars have primarily examined verbal narrative techniques in prose novels and visual techniques in graphic novels, often overlooking the unique strategies emerging from their intermediality. Graphic novels inhabit a space between prose and comics, fusing both textual and visual storytelling methods. This blending creates distinctive narrative devices that have not been extensively studied in graphic narrative and comics research. The visual narrative techniques found in graphic novels merit further exploration, particularly in the context of convergence culture, where traditional narrative methods can transition freely across different media. While prose novels have been adapted into various formats, graphic novels can also find new life in animated films and video games. Research has traditionally focused on adaptations of prose, whereas the area of comic book adaptations of graphic novels has received less attention. Unlike prose, which relies predominantly on verbal techniques, graphic novels incorporate both textual and visual narrative strategies influenced by the medium's attributes, significantly impacting storytelling and interpretation [11, 12].

Character Development in Graphic Novels

Reading graphic novels can enhance students' literacy skills in reading and social studies. With the rise of visual literacy in today's complex media landscape, graphic novels serve as a medium for discussing and analyzing visual rhetoric. They promote higher-level reading skills, comprehension, and empathy, allowing students to understand others' feelings. Analyzing graphic novels encourages critical thinking within literature and literacy. Students who find traditional texts challenging may excel at interpreting the illustrations and visual culture present in graphic novels. These works feature engaging, multi-layered stories that emphasize illustrations over text, making them appealing for younger audiences. As schools increasingly include graphic novels—especially adaptations of classic literature—in their curriculum, it is vital to assess their value for first and second graders. Investigating character development in children's graphic novels is crucial, as compelling stories revolve around character growth and struggles. One author explores themes of growing up and relationships through a blend of reality and fantasy, using humor to engage readers. Another addresses personal and social issues directly in her works. The analysis will cover character development, examining internal growth, personal and social relationships, and the interaction between characters and the audience, encapsulating insights about visual elements like illustrations, framing, and overall characterization [11, 13].

Themes Explored in Graphic Novels

Modern graphic novels have progressively grown in vitality in the fields of narration, writing craft, and design. Along with expanding their reach, each year they contribute new and often unexpected themes to the ecologies of literature. Major prizes have acknowledged their significance; significant national retail chains stimulate their visibility and in-house bustle, while targeted readers engage with graphic novels as fan bases, or they rather integrate them into their reading diets as touchstones for literary values like intuition, invention, or even escape into narrative desires accentuating the fantastical or surreal. However, new graphic novels continuously probe dramatic, or even uncharted, territories of subject matter within or outside existing fields. Moreover, they complicatedly engage the canonic or the cultural past or re-examine the very language of graphical framing devices and iconic resources or the boundaries of pictographic anecdote that both audiences and authors vis-a-vis. What are current graphic novels altering or altering in their engagement with written genres? What do they elicit or contemplate to readers being readers in their present time or in the next decades? It comes to their capabilities and potentials to influence readings in unforeseen or critical ways for wider readerships and to create a new readership while addressing possibly a permanent body to a not so formal readership that does not easily embrace outer boundaries, past histories without unique narratives, or preferred languages. A sequential art nevertheless combines anthropomorphic or personified dialogues and certain fection, memories, or reveries with semiotic visual signs, tropes, or symbols that bring forth other meanings. Consequently, how the addresses in whom unexpected revelations or breaking assumptions are always inscribed with higher levels of engagement or even experimentation? A new work by graphic designers and writers engaging in the past, their search of the senses and understanding of meaning making become a daunting challenge; neither are non-affiliated with any desired expectations from service or readerships defined by historical or institutional ties since graphic literature is normally a marginal one [14, 15].

Influence of Graphic Novels on Young Adult Literature

For young adult literature to be considered worthy as a primary text in an academic high school English classroom, it must delve into similar topics, themes, modes of writing, or literary techniques as the classic text. Such topics act as gateways that allow readers to glimpse into the more universal and timeless concepts present in classical literature. Whether it is coming of age, social injustice, or political repression, young adult literature written in the twenty-first century can delve into topics analogous to classic literature, if not stealing straight from the pages of the classic book. Each year, there are dozens of thought-provoking works of young adult literature published, yet classic literature that high school students must read has remained fairly stagnant. Austen's Pride and Prejudice, Orwell's Animal Farm, Fitzgerald's The Great Gatsby, and Salinger's The Catcher in the Rye are all frequently taught classic texts in high school English classrooms. Yet, teenage angst, loss, love, and fitting in are still real events traversed by adolescents today. Modern, contemporary young adult literature captures the nuances of these feelings perfectly, though they are not documented with the same difficult-won words as in classics. It is still possible to gain insight from contemporary young adult literature that discuss topics more contemporarily relevant with continual characterization, plot, and consequences all surrounding an adolescent whose well-being and success are paramount right then and there. However, unlike classic literature, young adult literature can highlight these effects in a world that a high school student actively resides in. Text messages, social media, dressing based on popularity, and writings or conversations full of self-indulgence that high school students engage in add immediate relevance that classic literature cannot deliver. These media add literal frequency to the topic and a libretto to write the words. The young adult protagonists are also flawed. They are rebellious; they meddle in improper situations, and they often make what a parent would consider incorrect decisions [16, 17].

Graphic Novels in Education

Instruction in K-8 classrooms often emphasizes print, viewing picture books and comics as inferior literature. The evaluation of any instructional text, including text-heavy picture books, requires understanding its content, format, and intent. Some theorists point out neglected elements in literature, particularly visual and auditory expressions. This discussion introduces a group of non-standard texts, blending features of print and picture books, alongside their recognition as contemporary works. Graphic novels connect with existing knowledge, while comics serve as significant sources of storytelling, creativity, and educational value. Many children report comic books as their top source of joy, effectively alleviating boredom in ways novels may not. This joy extends beyond childhood, evolving into a deeper appreciation for the genre, though some retain a light-hearted connection. This paper seeks to explore the benefits of comic books compared to prose and their relevance in traditional classroom settings. Graphic novels engage students in discussions about challenging themes like death and bullying, enhancing

motivation and comprehension across reading abilities. Students previously disinterested in reading have embraced comics, prompting a lasting engagement with literacy. Graphic novels can serve as a bridge for students transitioning from struggling readers to standard novels, making them an integral part of contemporary childhood experiences [18, 19].

Crossover of Genres: Graphic Novels and Other Media

A significant shift has occurred in the perception of comics, graphic novels, and graphic storytelling in the last decade. This shift can be largely associated with two disparate trends: the growth of new audiences for comics and graphic storytelling and the rising acceptance of comics, graphic novels, and graphic storytelling within the literary community. In the 1990s, the comics community was challenged by an impending "death of comic books," but the medium not only survived the impending crisis, it actively made the crossover to other media. Today comics exist as, or can be translated into, animated films, salsa dancing musicals, and literary hypertextualities. Not only does the academic study of comics, graphic novels, and graphic storytelling flourish in the wake of this renaissance of the medium, comics are actively used in various fields of education. Such uses range from health education and literacy teaching, medical illiteracy since the beginning of the AIDS crisis of the 1980s, the visually impaired, to the study of literature in high school as well as in undergraduate pedagogy. As examples, we present selected comic books with literary thematics: The Sandman, The League of Extraordinary Gentlemen, Gemma Bovery, Fables, Alice in Sunderland, House of Mystery, The Unwritten, and Kill Shakespeare. The premise we build our argumentation on is that the teaching of cultural literacy would profit from an approach where comics and the graphic novel are used. Included in this recent curricular shift as well as academic domain are articulated considered multi-modal texts such as film, theater, and television, but literature pedagogy now finds itself confronted with highly sophisticated visual as well as textual material that has sprung out of the most unexpected of sources — the comics. Comics had become more than merely text-entertaining infra-literature. Therefore, they should be recognized in their own right as not being merely illustrations of literariness, especially in view of the fact that a comic like Jim Woodring's Frank might be just as or even more literary than a novel by Michel Houellebecq. Following on the above question, in this essay, an exemplification is sought of the relevance of such intermediality and narration in the teaching of cultural literacy and literature. Mike Carey's and Peter Gross's graphic novel The Unwritten is analyzed as a test case [20, 21].

The Role of Illustrators and Writers

The creators of graphic novels are vital in shaping the text's content. Focusing on characters and action, children's and young adult graphic novels are akin to traditional chapter books. Illustrators or graphic designers uniquely contribute to storytelling. Authentic graphic novels incorporate images that are essential, turning them into artistic interpretations supporting the narrative. The text presents the main story while images facilitate understanding. This collaboration between text and illustration helps reveal the complexities of humanity. Various roles contribute to completing a graphic novel, including the author, editor, and agent. Literary agents negotiate contracts and secure advances for creators. After a book is accepted, design and production teams manage its assembly, negotiate rights sales, and plan for translations. An editor coordinates the creative and technical teams, preparing the book for print. An art director handles layouts and specifications to meet printer requirements. Some editor/publishers manage the mass publication of comic books. Once a contract is signed, a specialized team, including proofreaders, typographers, and illustrators, collaborates on production. They also coordinate events like exhibitions, readings, and national public appearances, enhancing the graphic novel's promotion and outreach [22, 23].

Case Studies of Influential Graphic Novels

This section will outline a few graphic novels that have uniquely impacted society or literature. It will discuss the people and groups that helped these publications gain recognition. Since the 1980s, numerous graphic novels changed perceptions of their medium. Three significant case studies include Maus: A Survivor's Tale, Fun Home: A Family Tragicomic, and A Contract with God. Maus focuses on exploring the Holocaust, a previously taboo topic. The black-and-white comic depicts the author's father's experiences and memories from this tragic time, illustrating the severe hate that aimed to eradicate the Jewish race. Many Holocaust survivors buried their pasts to lead normal lives, leading to a silence around these experiences. As the author grew up, he struggled to connect with his father and understand his trauma. Graphic novels serve as a legitimate medium for examining personal and social issues, showing that they need not be lighthearted. Maus exemplifies this by candidly addressing trauma and the Holocaust, receiving acclaim for its representation. Initially a comic serial about Holocaust survivors in a mental asylum, Maus's publication coincided with a resurgence in discussions about the Holocaust in

literature. Consequently, Maus reshaped public understanding and significance of the Holocaust for subsequent generations, whereas previous works failed to prepare future audiences. Its layered storytelling continues to enrich discussions on trauma and cultural memory [24, 25].

The Future of Graphic Novels in Literature

Some people argue that graphic novels are not real literature, dismissing them as childish comics with little merit. However, grouping all graphic novels into this disparaging category is unjustified. Their collective depth can surpass that of numerous traditional novels. The denigration of graphic novels often reflects more on the critic than on the medium itself. Graphic novels warrant the same level of literary criticism as conventional texts, reflecting their significant impact on readers and society. Their unique formats provoke thought about history and deeper societal issues, with some even enhancing understanding of events like the Holocaust. These works delve into human struggles, aspirations, and political turmoil, exploring themes like personal transformation and reconciliation. Rather than focusing on what has yet to be created, the more fitting question is what exists within this diverse medium. With an abundance of narratives, graphic novels are paving the way for a literary and artistic future. The exploration of graphic novels' impact from various angles is only beginning, and the potential for their evolution is vast. A hopeful vision is for a continued proliferation of diverse literature that encourages critical thinking, imagination, and emotional engagement in readers [26, 27].

Critical Reception of Graphic Novels

Although the barriers between graphic novels and film narratives are diminishing, traditional judgments still linger. Graphic narratives are often viewed as immature literature, seen as a diminishment of artistic representation. Concerns persist about an overemphasis on superheroes and a reduction of complexity in storytelling, pointing to weaknesses in plot and character development. Critics argue that the pictorial medium suffers from limitations in space and time, resulting in humor and absurdity perceived negatively. The challenge of conveying nuanced literary themes through visuals is substantial. Moreover, there's a perceived superficiality in focusing on visual aesthetics over deeper narratives. To many, recent visualizations reflect a detachment from art's traditional narrative forms, failing to engage on a deeper level. The rejection of pictorial art due to oversimplification disrupts appreciation for the medium's complexity. This divergent outlook disregards the intricate craftsmanship of graphic narratives, including their structural elements and the meticulous interplay of text and imagery, which should elevate their status in art production and scholarly analysis [28, 29].

CONCLUSION

Genetic testing is poised to reshape healthcare through early detection, tailored treatments, and predictive insights, yet its full potential hinges on two critical factors: accuracy and accessibility. Technological advances have significantly reduced sequencing costs and enhanced test capabilities, but disparities in access—particularly in low-resource settings—remain a pressing issue. Moreover, the complexity of variant interpretation and inconsistent regulatory oversight challenge test reliability and clinical utility. Ethical practices, informed consent, and standardized quality control must be prioritized to build public trust. Enhanced telehealth delivery, improved data sharing, and international collaboration can bridge existing gaps, making genetic testing not just a privilege for the few but a powerful diagnostic tool for all. As we continue engineering the future of genetic testing, the focus must remain on equity, efficacy, and informed application.

REFERENCES

1. Uslu A, Uslu NA. Improving primary school students' creative writing and social-emotional learning skills through collaborative digital storytelling. Acta Educationis Generalis. 2021 Aug;11(2):1-8.
2. Horváthová I. Social-emotional development of learners in primary level of education through "reading" wordless picture books. Educational Role of Language Journal. 2022;1(7):32-41.
3. Parsons P. Batman and his audience: The dialectic of culture. InThe many lives of the batman 2023 Feb 28 (pp. 66-89). Routledge.
4. Schmid JC, Schmid, Schmid JC. Frames and framing in documentary comics. Switzerland: Palgrave Macmillan; 2021 Feb 24.
5. Long V, Lee SK. From screens to streets: Interpretations of English-Speaking expatriates in Korea with reference to their prior experience of Hallyu and cross-cultural adjustment. International Journal of Intercultural Relations. 2025 Jul 1;107:102185.

6. Charlesworth TE, Caliskan A, Banaji MR. Historical representations of social groups across 200 years of word embeddings from Google Books. Proceedings of the National Academy of Sciences. 2022 Jul 12;119(28):e2121798119. pnas.org

7. Wei XS, Song YZ, Mac Aodha O, Wu J, Peng Y, Tang J, Yang J, Belongie S. Fine-grained image analysis with deep learning: A survey. IEEE transactions on pattern analysis and machine intelligence. 2021 Nov 9;44(12):8927-48. [PDF]

8. Liu Y, Duan H, Zhang Y, Li B, Zhang S, Zhao W, Yuan Y, Wang J, He C, Liu Z, Chen K. Mmbench: Is your multi-modal model an all-around player?. InEuropean conference on computer vision 2024 Sep 29 (pp. 216-233). Cham: Springer Nature Switzerland. [PDF]

9. Long V, Lee SK. From screens to streets: Interpretations of English-Speaking expatriates in Korea with reference to their prior experience of Hallyu and cross-cultural adjustment. International Journal of Intercultural Relations. 2025 Jul 1;107:102185.

10. Domyancich-Lee SC, Cleeland LR, McCleary JS. Teaching note—comics in the classroom: Teaching with graphic novels. Journal of Social Work Education. 2022 Jul 3;58(3):579-85. [HTML]

11. Khodorenko A. A NEW MEDIUM: THE JOURNEY OF THE GRAPHIC NOVEL AS AN ARTISTIC EXPRESSION. Journal "Ukrainian sense". 2024(2):114-21.

12. Navas D, Almeida LT. Literary Words and Images: Approximations between Comic Books and Picturebooks. Bakhtiniana: Revista de Estudos do Discurso. 2024 May 27;19:e63806p.

13. Bateman JA, Veloso FO, Lau YL. On the track of visual style: A diachronic study of page composition in comics and its functional motivation. Visual Communication. 2021 May;20(2):209-47.

14. Rahmeh H. DIGITALIZED BRIEFS: REFRAMING THE INFLUENCE OF THE DIGITAL ENVIRONMENT ON READERS'ENGAGEMENT WITH FLASH FICTION. European Journal of Literature, Language and Linguistics Studies. 2023 Aug 25;7(2). oapub.org

15. Liu C, Zhao Z, Feng R. AIGC-enabled digital presentation study of visual novels. E-Learning and Digital Media. 2024 Nov 12:20427530241310494.

16. Molnar DS, Blackburn M, Tacuri N, Zinga D, Flett GL, Hewitt PL. "I need to be perfect or else the world's gonna end": A qualitative analysis of adolescent perfectionists' expression and understanding of their perfectionism. Canadian Psychology/Psychologie canadienne. 2023 Nov;64(4):320.

17. Henderson A. From painters to pirates: A study of non-binary protagonists in Young Adult fiction. The International Journal of Young Adult Literature. 2022 Nov 2;3(1).

18. Bittner R. (Im) Possibility and (in) visibility: Arguing against 'just happens to be'in Young Adult literature. Queer Studies in Media & Popular Culture. 2016 Jun 1;1(2):199-214.

19. McNamara DS, Newton N, Christhilf K, McCarthy KS, Magliano JP, Allen LK. Anchoring your bridge: The importance of paraphrasing to inference making in self-explanations. Discourse Processes. 2023 May 28;60(4-5):337-62. ed.gov

20. Radeswandri RV, Thahir M. Evaluation on the use of online comics among students: Development studies at Universitas Terbuka. JTP—Jurnal Teknologi Pendidikan. 2021 Apr;23(1):37-48. semanticscholar.org

21. Moreno-Vera JR, Ponsoda-López de Atalaya S, Blanes-Mora R. By Toutatis! Trainee teachers' motivation when using comics to learn history. Frontiers in psychology. 2021 Oct 27;12:778792. frontiersin.org

22. Järvelä S, Nguyen A, Hadwin A. Human and artificial intelligence collaboration for socially shared regulation in learning. British Journal of Educational Technology. 2023 Sep;54(5):1057-76. wiley.com

23. Xu S, Wang YX, Gui L. Interdreamer: Zero-shot text to 3d dynamic human-object interaction. Advances in Neural Information Processing Systems. 2024 Dec 16;37:52858-90. neurips.cc

24. Engelstätter B, Ward MR. Video games become more mainstream. Entertainment Computing. 2022 May 1;42:100494.

25. Spigel L, Jenkins H. Same bat channel, different bat times: Mass culture and popular memory. InThe many lives of the Batman 2023 Feb 28 (pp. 117-148). Routledge.

26. Boucher M, Bach B, Stoiber C, Wang Z, Aigner W. Educational data comics: What can comics do for education in visualization?. In2023 IEEE VIS workshop on visualization education, literacy, and activities (eduVis) 2023 Oct 22 (pp. 34-40). IEEE. ed.ac.uk

27. Haghani M. What makes an informative and publication-worthy scientometric analysis of literature: a guide for authors, reviewers and editors. Transportation Research Interdisciplinary Perspectives. 2023 Nov 1;22:100956.
28. Round J. 'Is This a Book?'DC Vertigo and the Redefinition of Comics in the 1990s. The rise of the American comics artist: creators and contexts. 2010 Nov 11:14-30.
29. Jennings KA, Rule AC, Vander Zanden SM. Fifth graders' enjoyment, interest, and comprehension of graphic novels compared to heavily-illustrated and traditional novels. International Electronic Journal of Elementary Education. 2014;6(2):257.