Diane Zigo and Michael T. Moore

Science Fiction: Serious Reading, Critical Reading

Former high school teachers Diane Zigo and Michael T. Moore argue that science fiction deserves greater respect and a place in high school literature classes. They recommend titles and suggest activities for incorporating science fiction into English language arts instruction.

As high school English teachers we didn’t know what to do about science fiction. We were passionate about reading it. We knew we could passionately teach it, but aside from Fahrenheit 451 and Brave New World, we dared not risk teaching anything else. We would have loved to have tried Frank Herbert’s Dune with its themes of repatriation and genocide. Readers of Roger Zelazny’s Amber series knew long before the Matrix films about alternate universes and the one reality. In fact, alternate-reality travel was much easier by playing card than by ringing pay phone. We could have had our most reluctant readers hooked on Orson Scott Card’s Ender’s Game, where we could have had a field day exploring the nature of leadership and whether the ends justify the means. We think of the discussions we could have had, were we more daring, and suspect that we speak for a number of English teachers. Science fiction holds virtually untapped potential as a means for teaching students to read and think critically. Unfortunately, the modernist tradition has relegated science fiction to murky genre depths that imply it is a taste we should either leave at home or outgrow.

Fortunately, we haven’t outgrown it. We know students are reading science fiction voraciously and continue to read it as adults. Authors such as Orson Scott Card and Neal Stephenson share backpack space with Dickens and Hawthorne. We also know that there have been few detailed considerations of science fiction in English Journal in the past fifteen years, which suggests that English teachers are not discussing it.

In this article we discuss science fiction, or SF—the term preferred by its writers and readers—as appropriate literature for high school students and teachers. SF is an agreeably ambiguous term since it can also stand for speculative fiction, thereby opening the doors for a broader understanding of what this body of literature encompasses. We particularly want to encourage the use of SF to promote critical literacy, not only with high school students but also with the preservice and early-career teachers with whom we now work. Although we realize any literature can promote critical responses, we wish to make a special case for SF as the metaphoric literature for social and cultural introspection and for inspiring multiple interpretive possibilities.

In Teaching as a Subversive Activity, Postman and Weingartner argue that “schools must serve as the principal medium for developing in youth the attitudes and skills of social, political, and cultural criticism” (2). Their thesis, that “change—constant, accelerating, ubiquitous—is the most striking characteristic of the world we live in” (xiii), has become more relevant to us at the beginning of the new millennium. Educators can respond to such forces of change by resisting them through “the conservation of old ideas, concepts, attitudes, skills, and perceptions” (207–08) or by acknowledging them and providing students with tools to engage with them. Such a subversive pedagogy “has as its purpose the development of a new kind of person, one who . . . is
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an actively inquiring, flexible, creative, innovative, tolerant, liberal personality who can face uncertainty and ambiguity without disorientation, who can formulate viable new meanings to meet changes in the environment which threaten individual and mutual survival” (218).

During our careers as high school English teachers, we were hesitant to use SF in our teaching because of curricular restraints, unavailability of books, and our questions about how to introduce such books to a classroom of students rather than as recommendations to individual readers. In our current work as teacher educators at the beginning of the twenty-first century, however, we feel a greater urgency for advocating the use of SF texts within the curriculum and encouraging teachers to help their students develop the “questing-questioning, meaning-making” stance that Postman and Weingartner outline (218). In spite of our earlier ambivalence, we currently use SF texts within our English and literacy education course work.

“Literature” or Not?

Unfortunately, when critics use SF to refer to a genre of literature, they often reduce the literature’s significance. In her introduction to The Norton Book of Science Fiction, Ursula K. Le Guin reflects on the modernist attempt to reduce science fiction to formula: “Formula fiction is not a literary tradition but a commercial commodity. Formula fiction is inherently definable, self-limited, not to a shared treasury of living patterns, but to a set of stock figures, motifs, props, locutions—a list of items” (22; italics in original). Perhaps fear of the implications of such a label explains why Margaret Atwood has resisted efforts to classify The Handmaid’s Tale as SF, asserting that “[s]cience fiction is filled with Martians and space travel to other planets, and things like that. That isn’t this book at all” (“Reader’s,” par. 2).

In defense of our understanding and appreciation of SF as worthwhile literature, however, we concur with Theodore Sturgeon’s oft-cited “Law”:

Ninety percent of everything is crud.

Corollary 1: The existence of immense quantities of trash in science fiction is admitted and it is regretted; but it is no more unnatural than the existence of trash anywhere.

Corollary 2: The best science fiction is as good as the best fiction in any field. (qtd. in Bainbridge 12)

The best science fiction belies earlier characterizations. Much of it constitutes some of the best contemporary literature.

Science fiction is the fiction of change, and it is now in the mainstream as never before. A few illustrations make our point. Philip K. Dick’s short story “The Minority Report” takes place in a near future and involves disturbingly earnest attempts to eliminate crime through social control. Brian Aldiss’s “Supertoons Last All Summer Long” traces the longings of a five-year-old android boy who wants to be a real human child. Both stories have been made into recent films (Minority Report and AI: Artificial Intelligence) that visually realize the critical dialogues initiated by the authors. Neither fits the formulaic and outdated characterization of SF as “space operas” centered on plucky action heroes zapping bug-eyed monsters with ray guns. Many SF texts actually take place on Earth and deal with issues of immediate social and ethical relevance. Finally, SF is well-represented on many recommended reading lists for college-bound students with titles such as Slaughterhouse Five, The Time Machine, and Nineteen Eighty-Four lending further academic credibility to such texts and to our argument for their inclusion in English classrooms.

Reading SF: Thinking, Not Escaping

An examination of reading patterns and behaviors associated with SF suggests a greater degree of sophistication than what some readers and critics might initially assume. SF has evolved with an exceptionally organic interrelationship with the community of readers who sustain and actively shape it (Card, Introduction 1). We say “evolved” because even when SF emerged as an identifiable publishing category in the late 1920s with its own magazines (e.g., Amazing Stories), the featured “letters column” was important, as Orson Scott Card reminds us:

It was the letters column, really, that created the community. Enthusiasts of the new genre wrote in to [Hugo] Gernsback and then avidly read each other’s published letters. Then, skipping the middleman, they wrote directly to each other, and after a while began to meet and talk about what science fiction was and what it could be or should be. They started writing their own stories and sharing them with each other, and eventually began meeting as clubs and, later, in conventions that assembled serious readers of the genre from faraway places, until...
today the World Science Fiction convention draws participants from dozens of countries and languages. (Introduction 1)

Not surprisingly, SF readers have taken advantage of technology in extending their dialogues: extensive online chats, Web sites, and postings are on the Internet. Brooks Landon explains that serious discussions of SF must acknowledge its interdependence with its “culture of readers” (xix) who become experienced in “reading protocols [that are] quite different from those used for reading other kinds of fiction” (7).

On a basic level, such protocols can refer to the schema that readers develop as they continually read more SF. While this includes vocabulary such as FTL (faster-than-light travel), AI (artificial intelligence), Sol (our solar system’s sun), and cyber anything, along with a general background understanding of scientific fields such as astrophysics, genetics, and computer science, Landon is actually referring to even more complex reading protocols (xviii). For example, SF readers soon become aware that this genre is “distinctly self-conscious and self-referential. . . . [and] invites readers to appreciate the clever ways in which texts may allude to one another, to themselves, and to the act of reading” (Alkon xii). Landon boldly adds that “science fiction is perhaps the most recursive and most self-reflexive of all major literary movements” (xviii). Arthur C. Clarke’s now classic 2001: A Space Odyssey, for example, is one of the texts (and films) in the field most frequently alluded to, spawning countless variations on the inscrutable, paranoid AI and the daunting star-gate artifact.

While this could explain one reason that non-SF readers can be put off by the field, it also suggests that regular SF readers characteristically engage in the strategies used by good readers who read often, must necessarily make intertextual connections, reread challenging sections of text, rely on contextual clues to explain unfamiliar terminology or initially puzzling narrative structures, and synthesize content across numerous passages to make meaning (Allington 99–100). Le Guin wryly comments, “The reader can’t take much for granted in a fiction where the scenery can eat the characters” (Introduction 31).

During his presentation at the 2002 NCTE Annual Convention, Orson Scott Card encouraged the use of noncanonical literatures such as young adult literature, popular fiction, and SF to support student growth in reading comprehension and composition. In fact, Card suggested that some of the best examples of experimental and postmodern fiction can be found within the SF field, by writers such as Philip K. Dick, Harlan Ellison, and Philip José Farmer.

To follow Card’s recommendation in practice, Diane now uses Ellison’s story, “The Deathbird,” with her secondary English methods classes to help them participate in and reflect on their experience of student-centered literature discussions. She chose this text primarily because none of her students have previously read it and because its unconventional structure lends itself to the emergence of multiple interpretive possibilities. In post-discussion debriefings, students often admit that they would not normally be drawn to SF but find this text complex and compelling; nearly all agree that it extends their thinking about nonlinear narrative forms, helps them understand transactional approaches to literary instruction and response, and makes them more conscious of their reading and composing processes.

SF writing also offers carefully crafted examples of linguistic experimentation that can be used to support students’ understandings of sociolinguistic theory and discourse communities as well as help students make use of discourse analysis as a tool for literary interpretation (Kutz 155–62). In a recent graduate class, for example, Diane provided students with copies of the first pages of Anthony Burgess’s A Clockwork Orange, Russell Hoban’s Riddley Walker, and Damien Broderick’s Transcension. Each novel is composed in a fabricated future dialect that suggests a variety of social, political, and cultural influences on the story line and characters. Diane challenged the students to act as literary “discourse detectives.” She chose to reveal little about the background or plot of the novels, instead asking students to speculate on the nature of the contexts and tensions unfolding within each novel, based primarily on their analysis of the unfamiliar discourses. Students found the assignment intriguing and illuminating. In their responses, they typically
integrated their developing linguistic knowledge with emerging interpretations of the texts:

Broderick’s world is most obviously a future one, full of robots and new technology. The author appears to be setting up a society in which children are considered to be children until a much later age. When I began the reading, I assumed that Amanda was in her teens, but her mother mentions that Amanda will be thirty next year. This made me wonder if people live to a later age in this future. Amanda and her friend Vik speak a language in which they drop prepositions and pronouns, words that I suppose could be considered unnecessary for communication. Broderick implies that “automatics” do not bother with these types of words, which makes sense, considering computers respond to a series of commands which require no pronouns or prepositions. I suspect that Amanda and Vik are in defiance of their parents when they speak the language of the automatics and are therefore using it as a “code,” the same type most teenagers use.

Alex’s way of speaking [in A Clockwork Orange] reminded me of the importance of language as a way of belonging. Lacking that familiarity will brand one as an outsider. I wondered if Burgess’ aim was to demonstrate by this dialect a certain type of character in terms of status. Did all people in this futuristic world speak this way, or was it only Alex and his “droogs”? Would this kind of language mark them as young and concerned with style, women, and addictive stimulants? Having to translate Alex’s narrative put me in the position of outsider trying to figure out his angle: What does he want? What motivates him? Why does he speak this way? Where did he pick it up?

Rethinking Worlds in the Classroom

Finally, we highlight additional reasons that SF is an appropriate genre for fostering critical literacy and inquiry within English classrooms. SF is an ideal literature for rethinking worlds through words (Freire and Macedo 32). Ira Shor reminds us that critical literacy “connects the political and the personal, the public and the private, the global and the local, the economic and the pedagogical, for reinventing our lives and for promoting justice in place of inequity” (1). Perhaps even more explicitly than other literatures, SF brings together such considerations and identifies the complexities inherent in interrelated systems. SF invites readers to peel apart layers of meaning and interrogate subjective positions within our current techno-global existence, prodding us to ask who develops technology, who has access to technology, who benefits from technology, and who is oppressed by technology. Alfred Bester’s 1957 novel The Stars My Destination, for example, presents a chillingly prescient picture of a twenty-fifth century dominated by corporate social stratification. The Merchant Marine record of lead character Gully Foyle reads, “EDUCATION: NONE. SKILLS: NONE. MERITS: NONE. RECOMMENDATIONS: NONE” (16), thus setting up a bitter social satire that will trace Foyle’s quest for revenge against the vastly wealthy interplanetary shipping company that left him marooned in space.

Merely introducing SF texts, however, is not enough to prompt the critical social considerations suggested by SF’s subject matter. Educators considering SF texts will need to make careful selections of texts relevant to topics being studied and appropriate for the reading abilities and experiences of their students. For educators less familiar with the genre, we have provided an SF “Starter Kit” listing influential and accessible titles (see sidebar). In some cases, censorship issues must be considered since some SF stories include depictions of violence, sexual situations, or conversational expletives. Teachers may need to provide thoughtful rationales for using books that colleagues and parents may be unfamiliar with, and teachers may need to help students understand why books that are not about “real” human characters or settings are worth reading and thinking about. On the other hand, contemporary students may actually be more responsive to SF because of its increased prominence in the popular culture in which adolescents are immersed.

We propose a few approaches to integrating SF into the curriculum. While SF novels or stories can certainly be read as texts unto themselves or within a distinct SF unit, teachers might also include such texts to help develop a theme already taught or as companion pieces to traditionally read texts. In the same way that Joan F. Kaywell and Carol Jago advocate matching genre literature with canonical literature, we encourage this extension to SF texts. One way of doing this might be through the use of liter-
Nature circles. As classes meet to read and discuss a frequently taught selection such as A Separate Peace, literature circles might take up Ender's Game as a reading option. Such a pairing could explore the coming-of-age issue as well as the effects of war on children and how children mirror the adult society that has segregated them while training them in its ways. A few complementary text pairings might include:

> coming-of-age: Great Expectations or A Separate Peace with Ender's Game or The House of the Scorpion;

> colonialism: Heart of Darkness; Cry, the Beloved Country; or Things Fall Apart with The Martian Chronicles; Kirinyaga: A Fable of Utopia; or The Word for World Is Forest;

> war: All Quiet on the Western Front or Hiroshima with A Canticle for Leibowitz or Parable of the Sower;

> myths and legends: The Odyssey or classical mythology with 2001: A Space Odyssey. Nine Princes in Amber or Lord of Light;

> social, economic, and environmental crisis: The Grapes of Wrath with The Drylands.

Another way to provide meaningful space for SF in the language arts curriculum is to link it with interdisciplinary research projects, especially if a problem/posing-problem/solving inquiry stance is a valued instructional aim. When Diane taught ninth-grade English, she designed Imagine a World. Although this research project was not originally inspired by Postman and Weingartner's suggestion of promoting "future-oriented" inquiry in classrooms to foster questioning skills and creative thinking (203), the questions students generated were strikingly similar to examples Postman and Weingartner provide. Students formed groups that developed research-supported speculations on what life might look like fifty years in their future. They were required to write and perform scripts that enacted scenarios speculating on everyday life while incorporating numerous details obtained through their investigations.

One presentation portrayed a casual family outing in a park. The dialogue, props, and costuming, however, indicated a natural environment severely affected by global warming, resource depletion, extinctions, and changes in dietary habits and the food supply. As the skit unfolded, the actors wove in more information that ultimately revealed the degree of climate change that had taken place in five decades.

Another group created a scene in a bustling fast-food restaurant. The restaurant was almost completely automated, reflecting changes in technology, economics, and employment. Its menu suggested the influence of a global economy, resource shortages, changing immigration patterns, and genetic engineering. Instead of burgers and fries, customers could order vegetarian dishes from South American and Asian cuisines. Few meat items appeared, and those that did were prohibitively expensive. Monetary transactions were electronic.

Students also developed creative strategies for presenting their findings, relying on available technology to realize their efforts. One group simulated a real-time interview with personnel on an orbiting space station by creating a video of characters responding to questions being asked by a panel of

### AN SF "STARTER KIT" FOR READERS NEW TO THE FIELD

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<th>Author</th>
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<td>Isaac Asimov</td>
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<td>Arthur C. Clarke</td>
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<td>Nancy Farmer</td>
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<td>Ursula K. Le Guin</td>
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<td>Walter M. Miller Jr.</td>
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<td>Larry Niven</td>
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<td>Roger Zelazny</td>
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reporters in the classroom. The students worked out the timing so that as individuals on the panel asked questions, they were answered by members of the off-planet crew who appeared only on the television screen. Although Diane did not originally incorporate SF texts into this unit, choosing to emphasize nonfiction and media resources instead, she now believes that her students’ final projects would have been even more richly voiced, contextualized, detailed, and critical if students had also been reading examples of SF that elaborated on similar problems and alternatives through literature.

Our goal is ambitious. We want to break the genre lock on the dusty box of science fiction titles that deserve classroom time. We know students who hide their Sandman graphic novels inside their copies of Great Expectations, and we want to encourage teachers who have been hiding their SF titles to teach the texts they feel serve the aims and purposes of quality, thought-provoking literature. We also want to encourage those who have been dismissive of SF to give it a good, hard, critical, postmillennium look.

Works Cited


Jago, Carol. _With Rigor for All: Teaching the Classics to Contemporary Students._ Portsmouth: Heinemann, 2000.

Kaywell, Joan F., ed. _Adolescent Literature as a Complement to the Classics._ Norwood: Christopher-Gordon, 1993.


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