READING NARRATIVES SUPPORTS COGNITIVE DEVELOPMENT AMONG COLLEGE STUDENTS

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Abstract
While it is common knowledge that reading narratives enhances reading comprehension and writing skills, what is less well known is that reading narratives also aids in cognitive development and critical thinking. Such findings are important because studies show a decline in the number of narratives high school and college students have read during the past 20 years. Coinciding with a decline in reading narratives is an increase in the number of underprepared students who require developmental (remedial) coursework before enrolling in college-level courses. This is particularly true in reading and composition (writing) courses. The following article presents a review of the literature on reading narratives and cognitive development among college students. It presents results of studies conducted previously along with original research on reading narratives and enrollment in developmental versus college-level composition courses. This research shows that reading narratives helps develop students' ability to assume other people's perspectives, to consider a topic from multiple perspectives, to draw on knowledge from memory, and to evaluate new information by comparing it to prior knowledge.
Keywords: narrative, cognitive, reading, fantasy, perspective-taking.

1. Introduction

The number of incoming college students who require developmental (remedial) courses has risen during the past 20 years (Ignash 1997, McMillen et al. 1997, Southard and Clay 2004). Theories about this increase identify several potential causes. Some theories cite the high-stakes, teach-to-the-test K-12 environment created by No Child Left Behind; others point to increasing demand for college degrees in the employment sector, which means that colleges no longer admit only the top 10-15% of high school students; still others blame Generation Y's 'helicopter parents', who do everything for their children—including homework. However, recent research has identified another cause of the increasing need for developmental courses: a decline in reading during the past 20 years.

2. Declines in reading among students

Jolliffe and Harrl (2008) found that only 66% of high school and college students do the assigned reading or prepare for class on a regular basis. A

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study conducted by the National Endowment for the Arts (2007: 7) showed that 'the percentage of 17-year-olds who read nothing at all for pleasure has doubled over a 20-year period [and] . . . nearly half of all Americans ages 18 to 24 read no books for pleasure.' Of the average 54 minutes per day that high school and college students do spend reading, approximately half are dedicated to email and social networking sites rather than magazines or books (Jolliffe and Harrl 2008). Time spent reading narratives, such as novels and biographies, shows one of the sharpest declines. It is important to be conscious of declines in reading and their link to demand for developmental courses because when compared to students in college-level courses, students in developmental courses tend to score lower on measures of critical thinking, reading comprehension, and writing (Dembo and Seli 2004, Dorazio 1984, Feldman 2008, Gallick 1999, Hennessy and Evans 2005, Izaguirre 2000, National Endowment for the Arts 2007, Schmidt 2008). They also tend to earn lower GPAs, have higher attrition rates, and demonstrate less ability to consider topics from perspectives other than their own.

3. Reading narratives and cognitive development

Connections between reading narratives and performance in reading comprehension and writing seem obvious; what is less obvious is that reading narratives also impacts students' cognitive development and critical thinking, both of which are critical for academic success. Evidence that reading narratives spurs cognitive development comes in several forms. Research shows that students who spend more time reading narratives earn higher GPAs and have lower attrition rates (Chen 2007, Gallik 1999, Sheory and Mokhtari 1994). According to Mayer and Geher (as qtd. in Salovey and Sluyter 1997: 17), 'emotional perception of characters in situations,' as required when reading narratives, 'correlates with SAT scores (a measure of intelligence)'. Assuming a character's perspective while reading is also linked to the ability to consider issues from multiple perspectives, a key part of critical thinking (Facione 2004, Gallik 1999, Karolides 1992, Mayer and Geher 1997, Miller 2003).

Although narratives require a different mode of thinking from what is typically thought of as formal reasoning, they help develop cognition and critical thinking because they employ sequence, cause- effect relationships, reflection, and connections among related ideas (Bruner 1986, Gerrig 1993, Miller 2003). These cognitive processes also form a basis for academic writing; therefore, students need to master narratives before they can write college-level essays (Facione 2004, Oatley 2002). Accordingly, developmental composition courses require students to read and write narratives—skills previously mastered in high school—as a pre-requisite for

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enrolling in college-level composition courses.

Narratives' emphasis on sequence develops students' critical thinking by providing opportunities to practice engaged, critical reading. As readers become engaged in characters' experiences, they speculate about what will happen next. Readers also reflect on characters' thoughts and feelings, examining how they influence characters' behavior, then compare and contrast the characters with themselves. As a result of these comparisons, readers learn from the consequences of characters' behavior rather than learning from facing the consequences themselves (Davis 1980, Howe 2000, Oatley 2002). Reading narratives also increases the number and types of perspectives from which students can view experiences (Hakemulder 2001, Kakovsky 2006, Oatley 2002).

4. Transferring reading skills to real-world experiences

Anticipating what will happen next in a narrative also enhances critical reading and thinking skills, but it depends on readers' ability to identify emotionally with characters. Fantasy is one measure of how readers engage with texts by identifying with characters, assuming characters' perspectives, and mentally simulating characters' worlds (Coplan 2004, Davis 1980, Harris 2000, Mar et al., 2006, Seja and Russ 1990, Taylor and Tversky 1997, Zwaan 2004). Fantasy is highly correlated with perspective-taking, the ability to identify with and assume someone else's perspective in the real world (Davis 1980). Kuiken (as qtd. in Keen 2007: 217) explains that 'readers who linked themselves to story characters through personal experiences were more likely to report changes in self-perception.' Without perspective-taking, students cannot apply what they learn in the classroom to their lives outside of the classroom because application requires the ability to identify with and reflect on others' perceptions of their (the students') thoughts, speech, and behavior. Without perspective-taking, students are unable to learn rhetorical strategies such as anticipating and refuting counterarguments—considering an issue from the opposing side's perspective—which serve as the foundation of nearly all academic writing and comprise a large portion of college-level composition.

As part of fantasy, students learn to anticipate characters' problems and imagine and evaluate solutions. Correlations between fantasy and perspective-taking indicate that the ability to anticipate problems and devise solutions in fictional situations carries over to situations in the real world (Davis 1980, Mar 2004, Oatley 2002, Vine and Faust 1992). Reading fiction narratives is also 'highly correlated with nonfiction reading', which suggests that developing fantasy through narratives prepares students to engage with academic texts (Mar et al.: 698). Problem-solution analysis is a primary focus of college-level courses in nearly every discipline, including

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composition, so students need to develop fantasy in order to be adequately prepared for college-level coursework (Mar 2004, Miller 2003).

As previously mentioned, fantasy often involves identifying with characters emotionally and then comparing and contrasting one's own experiences with the characters' (Oatley 2002). Memory, therefore, plays an important role in fantasy. Identifying and managing emotions is also important to cognitive development because the brain stores, organizes, and recalls not only memories but also factual information by the emotions associated with it (Dirkx 2001, Oatley 2002, Taylor and Tversky 1997). In other words, emotions serve as the 'tabs' by which the brain locates and 'pulls' files containing memories and/or information relevant to a subject (Chateau and Jared 2000, Dirkx 2001, Rapp et al. 2001). The more practice readers have employing fantasy, the better they are able to recall previous knowledge and connect it to new information (Brookfield 1986, 2005, Tennant and Pogson 1995). This happens with both fiction and nonfiction reading; however, Oatley (2002) found that readers recall more memories when engaged with fiction narratives than they do when engaged with nonfiction texts. The link between narratives and recall of memories indicates that narratives provide as much, if not more, mental stimulation and opportunity for cognitive growth as nonfiction texts (Oatley 2002).

As cognitive development and critical thinking skills increase, students develop the ability to evaluate information. In fact, college-level composition courses focus on evaluation in reading, thinking, and writing. Evaluation, like memory, depends on emotion because emotion drives decision-making (Dirkx 2001, Facione 2004). The first step in evaluating the credibility of a piece of information is comparing it to one's own prior knowledge and experience, which involves internal—and sometimes external—narration (Rapp et al. 2001, Oatley 2002, Keen 2007). For example, upon encountering a new piece of information, one might think, *I know this is not true in all cases because I had a different experience than is described in this text*. College-level composition teaches students to go beyond this first step by cross-referencing sources of information; however, students struggle to understand how and why it is important to compare sources of information without first mastering narrative.

Links between narration, cognitive development, critical thinking, and placement in developmental versus college-level courses are supported by data from a dissertation study I conducted in October 2010. Results indicated a statistically significant difference ($p < .05$) in the number of narratives read by students in college-level composition as compared to students in developmental composition (Whalen 2010). Independent of age, students in college-level composition read more narratives than their peers in developmental composition. This seems to suggest a link between reading

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narratives and placement in college courses. Students in college-level composition also scored higher on measures of fantasy and perspective-taking, although this finding was not statistically significant (fantasy, p = .86; perspective-taking, p = .36) (Whalen 2010). It may indicate, as previous studies by other researchers have shown, that reading narratives helps develop fantasy and perspective-taking, key aspects of cognitive development and critical thinking. More research is needed to confirm or dispute the latter claim with greater certainty.

5. Instead of a conclusion

The number of students requiring developmental courses is not expected to decrease in the immediate future; therefore, it is important for educators to understand factors related to cognitive development and critical reading and thinking skills. In order for education to continue moving forward, students need to enroll in college prepared to do college-level coursework instead of requiring remedial lessons to catch up.

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