Common Core: Challenges and Opportunities to Incorporate Nonfiction into K-12 Curriculum

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Abstract

The Common Core standards recommend an integration of nonfiction literature into the K-12 curriculum. Anecdotal evidence, however, indicates that students are not receptive to reading nonfiction or informational material. Therefore, the first objective of this project is to examine the extent to which K-12 students, divided across gender, grade level, and school type prefer reading fiction over nonfiction literature. The project then takes a step further in investigating whether students show an overwhelming (dis)like for specific fiction and nonfiction subgenres. Using a survey-based approach to answer these questions, the project discovered the following trends: (i) male and lower elementary students prefer nonfiction compared to female, middle school, and high school students; (ii) nonfiction subgenres can be clustered into groups based on students' interests, and (iii) very weak penchant is seen for physical sciences. Taken together, these trends identify challenges and opportunities to integrate nonfiction materials into the K-12 curriculum.

Introduction

This project was conducted by the first author for Worcester Regional Middle School Science Fair [WS]. It was subsequently presented at the Middle School Massachusetts State Science and Engineering Fair [MS]. The project won the Grand Prize in the regional fair, and placed second in the state fair. The objective of the project was to answer the following two research questions:

- Determine the extent to which students across gender, grade level, and school type prefer to read fiction over nonfiction literature.
- With a more refined view, explore the specific fiction and nonfiction subgenres that the students prefer.

Background

The Common Core standards, which represent a most important initiative in contemporary U.S. education policy, recommend that teachers incorporate a significant amount of nonfiction literature into the K-12 curriculum [PM11]. This emphasis on nonfiction literature is believed to be necessary to promote students' success in college and prepare them for future multi-disciplinary careers [GM12]. According to the Common Core, in elementary schools, the ratio of fiction to nonfiction literature in the classroom is expected to be 50:50, whereas, in high school this ratio is expected to shift in favor of nonfiction literature 75:25 [CC].

Although exposure to nonfiction literature is necessary for future career preparedness and success, anecdotal evidence and contemporary education literature suggest that students find fiction (narrative texts) interesting, and nonfiction material (informational texts) unpleasant to read [GM12]. Therefore, the objective of this paper is to investigate if there is any empirical evidence to support this anecdotal observation that school-age kids prefer fiction over nonfiction genres. The Common Core standards also

do not offer any guidelines about which sub-genres, under the broad umbrellas of fiction and nonfiction genres, should teachers choose to best engage their students. A window into such natural inclinations of the students can guide teachers in striking a balance between students' enjoyment and fulfilling the Common Core literacy standards. Ultimately, understanding students' inclinations can provide insights into their interests in certain career options over the others. It can also offer an opportunity to nurture interest in those career options that the students tend to dislike from the early years. Thus, the second objective of this project is to investigate whether students desire specific fiction and nonfiction subgenres.

Process

We surveyed K-12 students to investigate and find empirical evidence to answer the above questions. To understand the extent to which students preferred fiction over nonfiction literature, we computed the distributions of the responses in these two categories across the variables of gender and grade level. To gain insights into the (dis)like of specific fiction and nonfiction subgenres, we further analyzed the data using the plurality [PV] and Borda count [BC] methods.

Results

Our results showed the following trends: (a) Male and lower elementary school students present an opportunity, whereas female and middle school students pose a challenge in cultivating an interest in nonfiction literature; (b) Students' preferences for nonfiction sub-genres cluster neatly into groups, offering teachers the flexibility to choose between these groups to balance the recommendations of the Common Core while sustaining students' interest; and (c) A very weak interest in physical sciences (physics and chemistry) could spell a concern for engineering and mathematics careers.

Future Work

Our future work consists of discussing and corroborating these observations with K-12 teachers is another concern of the future. Finally, a more detailed analysis of sub-genres, with respect to grade level, gender, and school type is also a part of the future work.

References

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