

## **Providing Books For Schools and Libraries in Africa: What Is the Impact on Literacy?**

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### **Abstract**

*An enormous shortage of text and library books exists throughout Africa. Accordingly, millions of donated text and library books have been shipped by a number of organizations over the past 25 years to Africa through funding provided by public and private organizations. While some research shows that localized textbooks increase student literacy rates, other data show that books are not useful if program delivery is not well-conceived and implemented. This paper discusses projects that provide books and educational materials for school and community library use in Africa, and assessed the impacts of such projects on literacy objectives established by the Millennium Development Goals. Best practices, cost-effectiveness, literacy benchmarks, and funding mechanisms were also discussed. Case studies from Tanzania and Liberia were analyzed as well as findings from projects in some of the 43 other African countries served by programs of this type. Finally, recommendations for future success of book projects in Africa were made. It was concluded that book donation programs can improve literacy rates in Africa provided that proper conditions are established. It was further concluded that more research data documenting impacts upon literacy from programs of this type are necessary.*

**Keywords:** Africa, education, development, literacy, reading

## **Introduction**

So powerful is literacy, wrote one African scholar, that it may well be the most significant factor that determines successful participation in modern society (Headlam, 2005). Literacy is a critical component of the world development agenda. The Millennium Development Goals (MDG's) and Education For All goals outlining key global development strategies demonstrate that education and reading are a major component of international development strategies, especially in Africa (Sachs, 2005). Goal two of the MDG's designates universal primary education by 2015 for boys and girls as one of eight key goals. Literacy rates for 15-24 year olds as measured by the United Nations are a key indicator (UN Millennium Project, 2006). Reading achievement goals, especially the literacy indicators referenced by the MDG's, are often measured in terms of reading comprehension (Pressley, 2006; Schwartz, 1984; Farr & Carey, 1986). Strategies for increasing reading comprehension, key to the advancement of literacy, have a broad base of scholarship in the United States (where government policies have sought to increase student reading capacity), and also across the world where scholars have sought to identify techniques and best practices for advancing literacy (International Reading Association, 2010).

One challenge to achieving the Millennium Development Goals in the area of education and literacy is that textbook acquisition programs have not provided sufficient textbooks, resulting in low educational capacity (World Bank, 1987, 2002). In efforts to address issues of global education and literacy, seven major donor organizations from the West, and a host of smaller organizations, provide millions of dollars in donated English-language text and library books annually to the African continent (Sources of Donated Books, 2005). To some, this is a reflection of colonialism and a misguided belief that English-language books and instruction are synonymous with education (Prah, 2003; Brock-Utne, 2001a, 2001b). To others, English-language textbooks are a cost-effective way for the West to assist African nations in meeting their educational goals (Books For Africa, 2010; Crystal, 2004). This analysis sought to address this topic and provide information regarding the extent to which English-language text and library book donation programs can potentially increase literacy levels in rural Africa.

### *Need for Text and Library Books in Africa*

Studies in Africa have confirmed the importance of textbooks on reading achievement. For example the World Bank undertook two large-scale studies (1987, 2002) involving over 89 education projects across Africa. The findings confirmed the cost-effectiveness and importance of localized and customized reading materials in increasing literacy skills in school settings. According to one report there is a pressing need for textbooks of all types in Africa, where, next to a good teacher, "a good textbook is the most effective medium of instruction" (World Bank, 2002, p. 5). Fehrler, Michaelowa, and Weber (2007) confirmed these findings in a different study of 22 Sub-Saharan African countries. This study confirmed the importance of textbooks and school libraries. Additionally, textbooks were shown to be extremely cost effective in the results of a complimentary analysis of these same 22 Sub-Saharan African countries (Michaelowa & Wechtler, 2006). The analysis concluded that textbooks, teacher guides, and

wall charts were relatively low-cost inputs with relatively high returns in terms of student achievement. Michaelowa and Wechtler (2006) found that by providing one textbook to every student in a classroom, literacy scores increased by 5-20 percent. A ten percent increase in literacy scores also occurred when a school or classroom library was present.

### *English-language Book Donations in Africa*

While the importance of literacy and the importance of text and library books has been shown, the issue of English language books donated from the United States is a separate issue that merits close scrutiny.

There are a number of arguments in favor of English-language donated books. English is currently an official language in 19 African countries (World Factbook, 2010). To systematically use local tribal languages for school instruction in Africa would require the preparation of educational materials in some 800 languages (Gordon, 2005), hence the use of English and other world languages for government, commerce, and education across Africa. The costs of producing books and other educational materials in local languages at the primary, secondary, and post-secondary levels may be cost-prohibitive, even when theoretically possible (World Bank, 2002). Additionally, strong evidence exists that the people of Africa want Western-language textbooks. Gomis and McCoy (2005), for example, found that without an official language policy in schools in Nugaal, Somalia, the language of instruction in high school defaulted to English because of a perception by the common people that this provided the best instruction for the future of the students. The World Bank (2002) also reported this same trend in favor of Western-language instruction across Africa. Local language education was viewed as second class, and a European language was perceived as necessary in most Sub-Saharan African countries for secondary education and, later, for higher education and for success in business or government. Adequate provision for transition to a second language of instruction was identified as necessary (World Bank, 2002). Statements of support come from the highest levels, such as that indicated by the South African ambassador to the United States who praised a recent book shipment from the United States with these words: "The impact cannot be articulated in words, but they will benefit the people both young and old, those who cannot read but aspire to do so and those who can read and love to do so" (Nhlapo, 2008).

Opponents of English-language textbook donation programs have concluded that such English-based educational programs do not increase educational advancement in Africa (Brock-Utne, 2001a, 2001b; Prah, 2003; Bunyi, 1999). Bunyi (1999) asserted that Western education was brought to Africa by the European colonial powers and as such Eurocentricism was part of its baggage. Bunyi (1999) and Prah (2003) argued that in order for education to liberate itself from the Eurocentric colonial legacy, African education should be grounded in African indigenous cultures as primary vehicles for social transformation.

Despite the criticisms that English-language books provide an imperfect education, due to a lack of available books in local languages and because of a perception by many that English-language education provides more opportunity, millions of U.S. school and library books continue to be shipped to Africa annually (Books For Africa, 2010).

## **Purpose and Objectives**

The purpose of this analysis was to determine if usage of donated English-language text and library books had a positive effect upon literacy in Africa. The research questions were: 1. What do recent studies conducted in Tanzania and Liberia reveal about the usefulness of book donation programs?; 2. What types of donated books are most useful based upon the experience of book donation programs?; 3. What issues of access are important to ensuring proper use of donated books?; and 4. Is the book donation model scaleable in addressing Africa-wide issues of literacy and education? Efforts to answer these research questions combined the fields of study of international development, literacy research, and African studies with special focus on textbook donations.

Student reading ability is key for student achievement in all disciplines. Quality text and library books have been shown to influence reading achievement throughout the world (Lance, 1994; Worthy, Moorman, & Turner, 1999; World Bank, 1989, 2002). Yet, there is currently limited empirical evidence regarding the influence of English-language books from book donation programs upon student reading comprehension scores. Questions also remain regarding the value of donated textbooks from the United States in Africa, given the cultural differences. The reason for this lack of conclusive evidence is that studies gauging the impacts on learners, teachers, and administrators in Africa are difficult to implement due to the difficulty of coordinating the delivery of books to research locations. Likewise, a lack of effective control of the research environment in African school settings is an impediment to securing quality data. Finally, organizations involved in the shipment of textbooks are often under-staffed without sufficient financial resources to undertake studies researching achievements (Books For Africa, 2010; Sources of donated books, 2005).

## **Research Findings from Tanzania and Liberia**

### *Tanzania Research*

In 2007-2009, a research study was implemented to analyze the impact of text and library books upon reading comprehension and fluency upon students in Tanzania (Plonski, 2009). This study used a comparative case study that incorporated a mixed methods design. This study followed protocols established by Yin (1989) using as data collection sources interviews at all four schools with teachers and administrators, participant observation, and direct observations. A mixed methods triangulation design was implemented in order to secure maximum data for analysis purposes, including qualitative data that helped to provide better understanding of quantitative data secured. The study thus obtained different but complementary data on the topic

of reading comprehension, fluency, and understandings of school administrators regarding value to students of donated English-language books (Creswell & Clark, 2007). The intent of this design was to bring together differing strengths of quantitative methods (large sample size, trends, generalization) with those of qualitative methods (small sample size, details, in-depth treatment) (Creswell & Clark, 2007). The research hypothesis of this study was as follows: Providing English-language donated text and library books from the United States that are properly utilized in library settings will increase student mean scores in reading comprehension and fluency for the treatment schools in this study more than student mean scores from the control group.

For the qualitative portion of this study, 18 adult participants (14 male and four female) were formally interviewed at the four schools at which student achievement information was obtained following a pre-established case study protocol (Yin, 1989). Four participants were interviewed at a high school for boys in Singida, Tanzania; five participants were interviewed at a high achievement boarding school for girls in Dodoma, Tanzania; and nine participants were interviewed at two secondary schools for boys and girls in Dodoma. Interviews of adult participants at two schools were conducted in small groups due to time restrictions. All other interviews were conducted on a one-on-one basis. Participants included two administrative officials (one headmistress and one academic officer); six chemistry/biology teachers; three English/Swahili teachers; two history/geography teachers; one physics teacher; one mathematics teacher; one librarian; one business teacher; and one civics teacher.

A qualitative instrument consisting of interview questions was developed by the researcher to collect additional data regarding the breadth of impressions of teachers and administrators relating to the influence of donated books upon the students in their schools. The researcher traveled to Dodoma, Tanzania in July of 2006 to discuss opportunities for research implementation with assistance from individuals within the Dodoma-based Poverty Eradication Network (PEN Trust). An official of PEN Trust, familiar with local cultural norms and fluent in Kiswahili, was selected as a facilitator and was on location at all data collection sessions. The instrument was written and administered in English by the researcher in January/February of 2007 and February of 2008 with assistance from officials of the PEN Trust.

For the quantitative portion of this study, a pretest-posttest control group design (Gall, Gall, & Borg, 2003; Campbell & Stanley, 1963) was used to conduct the research that was designed to determine the influence of donated English-language text and library books on reading fluency and comprehension scores. Students in four schools were investigated, with one school used as a control group. 128 students were initially tested at the pretest for all four schools. Following an attrition rate of 39 percent, 78 students were tested in the posttest assessment. Using the protocol outlined by Campbell and Stanley (1963) only data secured from the 78 students completing pretest and posttest assessments were included in this study.

The research instrument consisted of a standardized, field-tested, reading achievement test prepared by AIMSweb (2010) that assessed participant reading comprehension. AIMSweb reported that this instrument or similar variants have been used in over 20,000 schools in the United States. The comprehension instrument assessed the ability of the participant to interpret

the meaning of words correctly in a five-minute test (the MAZE assessment) with a score of correct responses (CR's). MAZE has a validity coefficient of .76 (AIMSweb Technical Manual, 2002) and a mean alternate-form reliability coefficient of .81 (Shin, Deno, & Espin, 2000).

### *Research Findings*

The results of the investigation indicated there were some significant differences in student fluency and reading comprehension achievement scores. The differences were influenced by different levels of student access to the donated English-language books and student gender. In addition, data from the interviews revealed that the teachers and administrators believed the donated textbooks had educational value for the students. Further, the data revealed an understanding by interview participants that donated English-language books did not cause cultural harm and did improve student achievement scores. Six themes were revealed which confirmed the value of the donated English-language books.

This study found evidence that the intervention of English-language books influenced increased reading comprehension scores. Results of the MAZE test (a measure of comprehension) showed a significant comprehension by school interaction showing the influence of reading comprehension across schools. For the MAZE comprehension test, a significant main effect of comprehension was found,  $F(1,74) = 55.780, p = .000$ . Examination of pre and posttest means indicated that student increased reading comprehension scores were significant (pretest  $M = 5.0, SD = 4.4$ , posttest  $M = 12.1, SD = 7.7$ ). Bonferroni post hoc analyses procedures revealed that statistical differences existed between the comprehension scores of students from the control School 1 ( $M = 3.8, SD = 0.5$ ) and the treatment School 2 ( $M = 7.4, SD = 2.2$ ).

Additionally, for reading fluency the amount of time students had access to donated English-language books was a factor contributing to significant differences in student fluency reading scores. Pre-test ( $M = 115.8, SD = 32.8$ ) and post-test ( $M = 122.4, SD = 29.3$ ) mean scores indicated that increases in student reading fluency scores were significant. Data reveal that a significant main effect for fluency was found ( $F_{(1,72)} = 6.05, p = .016$ ). As reflected in the fluency and school interaction statistics ( $F_{(1,72)} = 4.64, p = .005$ ) there was a significant difference in reading scores also due to the amount of time students had access to books and the school in which they were enrolled.

In order to develop an understanding of the experiences and knowledge of teachers and administrators regarding the value of books for the students, this study considered the question "what is it like for the students to have access to the English-language books donated from the United States?" Eighteen interviews, 14 male and four female, of teachers and administrators were conducted for this study. Following compilation of the responses, data was analyzed using the protocol outlined by Creswell and Clark (2007), Gall, Gall, & Borg (2003), and Yin (1989) and a number of themes were identified. Direct observations were also noted and recorded. Six key themes emerged from the analysis of the interview data. The themes identified were as follows:

Theme I: Donated English-language text and library books designed for use in a U.S.

curriculum did have perceived value in school settings in Tanzania.

Theme II: There was a need for additional English-language donated text and library books in school settings in Tanzania.

Theme III: Providing text and library books in the English language did not cause cultural harm.

Theme IV: English-language text and library books would have more value were they specifically designed for use in a Tanzanian environment.

Theme V: Lack of books was one of many barriers that exist to optimal learning in Tanzanian in Tanzanian school environments.

Theme VI: Lack of library resources to effectively use books provided a major barrier to their effective use in some of the school settings.

### *Liberia Research*

During the time period of 2007-09, Visions In Action partnered with Books For Africa and USAID on a school book project in Liberia entitled “The Million Book March for Literacy” (Visions In Action, 2010). This project envisioned the shipment and distribution of one million k-12 schoolbooks across Liberia. Under this initiative, Books For Africa supplied the books, Visions in Action provided teacher training and book distribution to locations across Liberia, and USAID provided funding.

The program sought to supply hundreds of school libraries across the country with books for students at all grade levels, including language arts, math, science, and social studies textbooks, dictionaries, encyclopedias, nonfiction general reading materials, and novels. The goals were to serve every county in Liberia, and to serve about one half of the country’s schools. According to the Liberian Ministry of Education, before this project began 95% of the war-torn country’s schools had no libraries (Visions In Action, 2010). Appropriate materials were also sent to universities. Under this project, 3,400 teachers and librarians were targeted for training in library management and administration, and libraries were built or upgraded to accommodate the new books. Shelves and locks were also provided to school libraries that needed them. Visions launched a National Literacy Day on September 8, 2008, to encourage use of the libraries and continuing improvement in education.

This project achieved notable successes. Thirty 40-foot sea containers of books were shipped by Books For Africa under this project, representing 600 tons of books valued at approximately \$12 million. These books were distributed to libraries in 15 counties across Liberia under this project (Visions In Action, 2010). Well over 830 libraries were served. 67 workshops were held in these 15 counties, resulting in 2,737 teachers/librarians trained in 1,348 schools. 1,960 shelving kits and 220 security locks were provided to 367 schools. This project

utilized the staff resources of approximately 10 staff FTE's from Books For Africa, and 11 staff FTE's from Visions In Action in Liberia.

While this project achieved notable successes in terms of delivery of learning materials, there were also a number of lessons learned. First, due to a mis-calculation regarding the average number of books in a 40-foot sea container, only 660,000 books were delivered under the USAID grant (although when considering shipments made from other funding sources by Books For Africa to Liberia during this time frame, approximately 900,000 books were delivered). Second, as the project design did not include a baseline literacy assessment prior to book deliveries, it was not possible to measure the positive impacts on literacy under this project. Third, while large quantities of books were delivered under this project, many schools (including schools that had their staff trained in library management) were not able to benefit from this project due to insufficient resources.

Key findings reached by Books For Africa and Visions In Action staff regarding this project were as follows: 1. A competent NGO such as Visions In Action must be included in large-scale book projects of this sort to ensure that books are properly distributed across the country or region and to ensure librarians are properly trained and that libraries are ready to receive books; 2. Focusing upon a region of a country as opposed to a full country may be necessary to ensure that the target area is fully saturated with books; 3. A baseline literacy assessment, when possible, will help provide a point from which literacy improvements can be measured. Furthermore, including funds for such a literacy assessment over the life of the project would add value to the project.

### **Best Practices Findings from Books For Africa**

Books For Africa (Books For Africa, 2010) is the largest shipper of donated text and library books to the African continent, shipping over 23 million books to 45 African countries since 1988. In addition to these shipments, Books For Africa staff have had the opportunity to consult with and observe activities of other NGO's shipping donated books to Africa. These additional NGO's include the International Book Bank, the Sabre Foundation, Book Aid International, Room to Read, Brother's Brother Foundation, and World Vision. In the course of these activities, Books For Africa (2010) has made the following recommendations regarding best practices in book deliveries to Africa.

#### *Book Usefulness*

Given the high cost of shipping donated books to Africa, it has been found to be imperative that books provided are useful to the recipients in Africa as follows: 1. They must not be too old such that their content is dated; 2. They must be in a language whereby they can be read by the local population; 3. Curriculum issues should be considered such that the books are integrated into classroom studies; 4. The types of books (i.e. textbooks vs. readers) provided should match the needs of the local school or community; and 5. The context of books provided should not be so Eurocentric that they are not useful to African populations.



*Age.* Books For Africa, and most of the other distributors of donated books, have all concluded that it is imperative that books provided are not so old as to contain dated information. A key goal of book distribution programs is to provide schools and libraries in Africa with up to date educational material. For this reason, a number of book distributors to Africa have established policies whereby only new books will be shipped. For example, one provider of French books stated the following: “In collaboration with publishers, our organization has vowed to provide the most destitute and isolated among children and teenagers with new and up-to-date books. To those who have experienced only scarce and dilapidated textbooks, ... we believe that for a child, a new books is this present, which can awaken the desire to discover and learn” (Biblionef, 2010). Books For Africa has determined that it is not essential that all books shipped to Africa be new in order to ensure that they are current, and furthermore due to limited supplies of new books, Books For Africa has found that the shipment to Africa of used books is necessary in order to meet the tremendous demand for books. However, Books For Africa has established a policy that it will not ship books older than 10 years (Books For Africa, 2010).

*Language.* A best practice is that books shipped to Africa must be in a language such that the local population can read them. For example, if local languages are in use in schools and communities in Africa, providing books in Western languages (such as English) does not increase levels of literacy as the books will never be read. Further, for those African countries where Western languages other than English (such as Arabic, French, or Portuguese) are prevalent, shipment of books in English will not increase levels of literacy. To address this need to ensure that books are provided in correct languages, Books For Africa, and most providers of donated books, have established demand driven models governing book shipments. Under this model, end users pay a fee (usually the cost of shipping plus administrative costs) to secure books. This model provides assurance that those financing book deliveries have made an assessment that the books will be useful for end users in Africa. This model does not prevent English-language books from being shipped, for example, to Francophone West Africa. However, it does result in the vast majority of English books being shipped to African countries where English is an official language. For example, over Books For Africa’s 23-year history, the biggest recipients of book shipments have been Ghana, Ethiopia, Liberia, Tanzania, and South Africa (Books For Africa, 2010). Arabic, Francophone, and Portuguese-speaking areas of Africa have received almost no shipments of English language books. While this demand-driven model has been successful in large part, it is important that if large-scale book projects are established that the books are shipped to countries where the language matches the books. Additionally, as Western languages are not as prevalent as local languages especially in poorer and more rural locations in Africa, it must be acknowledged that shipment of Western language books does have limitations in advancing literacy from a continent-wide perspective. Some book shipment partners, such as Room To Read (2010) have undertaken to print books in local languages. However, such practices while successful for literacy and end users, presents cost limitations and hence custom printing in local languages is not widely undertaken by Western aid agencies. In short, printing books in local languages provides outstanding services for the few, while shipping English-language books provides good services for the many.

*Curriculum Matches.* Books For Africa has found that if books do not match the local

curriculum in a school or country setting, books will be less useful and will have lessened readership. As most books shipped from Western sources to Africa do not meet local curriculum, but rather meet the curriculum from the countries of origin, this presents a barrier to use in local settings. As a result, donated books are often classified as supplemental to local curriculum by African ministries of education. This means that local teachers must find a means of incorporating books into their curricula, or the donated books are simply deposited in the library and students use them to supplement what they are learning in classroom studies. Books For Africa has found that the issue of disconnect between Western curriculum and African curriculum with regard to book shipments is inherent in the book donation model. The only means of ensuring that donated books will meet local curriculum is to custom-print books for use in local settings. USAID's African Education Initiative (2010) undertook to print some 15 million books specifically designed for local curricula. However, as is the case with custom-printing of books in local languages, the increased costs of custom printing have resulted in insufficient quantities of such books being produced. Additionally, the cost-benefit analysis of custom printing of books geared to local curricula (at a cost of perhaps \$10 or more per book) must be weighed against the cost of shipping a donated book to Africa (at a cost of perhaps 50 cents per book). Thus, the issue becomes whether it is better to provide one customized book or 20 Western books.

Books For Africa has determined that it is most cost-effective to ship Western books, but that a plan for use of the books by end users in Africa should be developed so that the books are either incorporated into classroom use by instructors, or are made available as supplemental reading for students in libraries.

*Types of Books (Categories).* Books For Africa has found that generally there are two major uses for donated books in Africa. Either the books are used as classroom sets with multiple copies of the same book, or the books are used in libraries where the goal is to have individual copies of multiple titles. It was found to be imperative that the end users of the books have an understanding of use of books so that the books will be useful whether used in classroom settings or in library settings. Additionally, it is important that the types of books provided meet the needs of the recipients. For example, primary schools should receive primary level books, not secondary books. Further, if mathematics books are needed, that is what should be sent as opposed to books geared to English language instruction (for example). Books For Africa has established a best practice whereby books are selected by categories by end users. In this way, end users in Africa can determine the types of books they want included in their shipments. One weakness in the Books For Africa system is that it is not possible to designate classroom textbooks vs. library readers. Another weakness is that the Books For Africa sorting model does not allow for uniform text packing. Hence, types of textbooks are often mixed. Some book donors have addressed this issue by providing lists and allowing recipients to select individual books by title and by quantity. While this model is more specific, and valuable for some end-users, Books For Africa has found that many end users do not want to select some 22,000 books by title when afforded this opportunity and prefer the selection by category model.

Regardless of the selection by title or selection by category, Books For Africa has determined that a best practice is to ensure that end users of books in Africa have the opportunity

to stipulate the types of books they need in their shipments. It was further found by Books For Africa that a best practice is for end users of books to have a plan for the integration of books either for classroom use, or for library use.

*Context (i.e. Eurocentric).* Books For Africa has found that certain categories of books are so Eurocentric that they are of very limited utility in Africa, and hence should not be included in shipments to Africa (or should be included in only very limited quantities). Examples of books that would not have a proper context in Africa would include books about American government and civics, biographies of famous American personalities, travel books about American geographic locations, American law books geared towards case law in specific U.S. states, and cookbooks geared towards American audiences. While these books might be of topics that are of some interest to some readers in Africa, Books For Africa has found that sending large quantities of such books is not useful to advancing education and literacy in Africa as they are of only limited interest. For example, in one site visit in Addis Ababa, Ethiopia, in 2006 a Books For Africa team was shown large quantities of U.S. case law books and asked to never again send such material as it was not useful (Books For Africa, 2010). In general, Books For Africa has found that it is best to allow self-selection of books by category and that it is best to allow recipients to determine for themselves what is useful. However, repeated experience and feedback from African recipients has shown that most books in these categories should not be accepted for donation, and if received should not be shipped to African partners as they will not be useful.

### *Book Access*

Books For Africa found that access must be provided to ensure that even if the books are useful, they are: 1. Stored in a proper library or school setting; 2. Easily accessed by students and the community; and 3. Ideally, allowed to be checked out of the library for home use thereby allowing students and the community to read books for longer periods in home settings.

*Proper Library.* Books For Africa has found that a best practice is the establishment of a library in Africa to store books, and to ensure use by students. Establishment of a library ensures that the books will be protected from damage or theft. Additionally, it was found that most well-established and well-managed schools did have school libraries with current books. On several Books For Africa site visits in South Africa (2005), Tanzania (2007) and Morocco (2010), books were found to be held in storage and not made available to students. Oftentimes, an issue with libraries was that they were too small. Thus, it was found that even if books were held by the school in sufficient quantities, lack of library space was a barrier preventing books from being properly used. As was stated to Books For Africa in one private communication in 2010 by representatives of the U.S. Embassy in Morocco, "there are storeroom(s) with very large portions of the shipment still undistributed, 14 months later" (Books For Africa, 2010). A best practice established by Visions In Action (2010) for the Million March for Literacy was to only provide books to schools that provided assurance that they had a proper library with a properly trained librarian.

*Access to Library.* In addition to having a proper library, Books For Africa found that a

best practice is to ensure that students have access to the library. On one Books For Africa site visit to Singida, Tanzania, a very spacious library with large quantities of current texts was observed. However, due to the lack of a librarian no students had access to the library and a thick coating of dust was observed on all of the books in the library. On another site visit to Dodoma, Tanzania in 2007 it was reported that the school had a library but that due to lack of a librarian the library was not open to students (Plonski, 2009).

*Home Use.* Books For Africa has found that a best practice is to provide sufficient books such that students can check books out of the library for use in home locations. Research has clearly shown that home use of books increases student literacy and educational levels (Evans, Kelley, Sikora, and Treiman, 2010). While many libraries are concerned that if books leave the library, they will not be brought back, other libraries have established procedures to allow for check out of books. Successful procedures have included library membership for community libraries (for which a small annual fee is paid for the privilege of checking out books); good record-keeping to ensure that books are returned by specific patrons and students; and a library model that provides for sufficient books and the on-going provision of books from outside sources such that loss of books is less of a concern. Confidence and the ability to take a risk can also be a positive factor. As one librarian relayed to a Books For Africa board member in Malawi when asked how they knew that books that were checked out of the library would be returned, “well, we know everyone in town.”(Books For Africa, 2010).

### **Funding and Cost Effectiveness Issues**

Books For Africa found that success of book distribution programs in a larger sense depends upon the extent to which models are scalable. Thus, in determining whether donated book projects driven from Western sources is an Africa-wide solution, one must ask whether sufficient donated books are available in the West to meet the needs of some 400 million African children across the continent (Demographic Yearbook, 2008). Additionally, the cost of providing these books either from donated sources or from printing these books must be taken into consideration to determine if sufficient resources are available.

#### *Africa-wide Solution Necessary*

In analyzing the potential of book distribution programs as a means of improving literacy levels across Africa, at issue is the extent to which these programs are niche programs increasing literacy levels in specific countries or communities, or whether these programs have the potential to increase literacy across the African continent. For example, Books For Africa is the largest shipper of books to the African continent. However, over 23 years it has managed to ship only 23 million books across the entire continent due to funding restraints. Books For Africa has found that the model of book distribution is scalable across the African continent. Forty-five countries of the total 54 countries in African have been served by the Books For Africa book distribution model. This proves that the model can serve the entire geographic area of Africa provided that sufficient quantities of books and funding can be secured.

### *Sufficient Books Needed*

At issue for book distribution models is the issue of whether or not sufficient donated books are available for shipment to Africa. Thus, if there are 400 million children in Africa, and each child were to use approximately 10 books, that would require approximately four billion books across Africa. Given that Books For Africa was only able to ship approximately 1.6 million books to Africa in 2009, and given that the largest inventory of pre-owned textbooks in the United States currently has an inventory of approximately four million books (Follett, 2010), this would imply that there is a challenge of securing sufficient quantities of donated books to provide all learners across Africa with books. However, Books For Africa has found that if it were to establish warehouses in locations in other areas of the U.S. (currently it has two warehouses) it could secure many more millions of books for shipment to Africa. Thus, Books For Africa finds that while it cannot immediately secure the billions of books that are needed across the African continent, it can secure many more millions of books provided that financial resources can be secured. The U.S. Census Bureau (2010) estimates that total retail book sales in the United States in 2009 were approximately \$16.6 billion, and other data show that total receipts of the world's book publishing community in 1999 were estimated at \$120 billion, with the United States accounting for 25 percent of this total (Book Publishing Marketing Research, 2010).

### *Costs are a Factor*

Books For Africa has found that it can ship a book to Africa for approximately 50 cents, and that for an additional 50 cents that book can be transported to its final location at a school or library and a librarian can be trained in management of the books. The cost of providing a donated book to a school library in Africa is therefore approximately one dollar per book. Thus the cost of providing four billion books to 400 million African children would be approximately \$4 billion. The cost of printing four billion books at approximately \$10 per unit, and cost of transporting these same books and providing a trained librarian at \$1 per book, would be \$44 billion. Thus, the clear cost advantage for donated book programs is to ship books that have already been printed. Such a model saves approximately \$40 billion. However, whether the cost is \$4 billion to ship donated books or \$44 billion to ship custom-printed donated books, funding in this range has not been made available to date. Books For Africa finds however that its model is scale-able provided that sufficient financial resources can be provided, and that while the model may not be able to generate sufficient donated books for the entire continent of Africa at this time, it can serve as an extremely cost effective means of increasing literacy across the African continent compared to other models and the costs associated with custom printing books.

## **Conclusions and Implications**

The findings from this analysis demonstrated that in one study donated English language text and library books had significant influence upon the comprehension and fluency scores of some Tanzanian students with differing levels of access to the books (Plonski, 2010). It was also found that the Tanzanian teachers and administrators who participated in the study found the donated English-language books to be valuable and did not judge them to be harmful from a

cultural standpoint. This analysis further found that a large-scale book distribution project, such as the "Million Book March in Liberia, can be successfully implemented and can serve as a country-wide means of stocking school libraries across an entire country (Visions In Action, 2010). Finally, this analysis found that organizations such as Books For Africa have been successful in distributing books across Africa in a cost-effective manner and that these books are useful provided that certain criteria are followed (Books For Africa, 2010).

This analysis placed into perspective findings presented by Brock-Utne (2001a, 2001b), Bunyi (1999), and Prah (2003) arguing that Western language education in Africa provided imperfect education and caused cultural harm. This analysis supported findings presented by Crystal (2004) demonstrating that in a global environment, international modes of communication and the need for a common language are becoming more and more important across the world for economic, cultural, and social reasons. For example, Crystal envisioned that the development of a whole "English family" of languages, each of which will be mixed with local languages, will probably be the main linguistic trend of the twenty-first century. This analysis found evidence that donated English-language books from the United States can increase educational capacity in Tanzania and elsewhere in Africa, and that students and teachers saw English-language reading as foundational to further academic achievement, employment, and economic vitality.

This analysis found that donated books provided from Western sources did improve literacy rates and learning in a number of locations studied. Additionally, it was found that a perception of benefit exists in many of the schools and communities served through these book donation programs. A number of factors key to the success of these programs were identified. First books must be useful in the locations provided in Africa as follows: 1. They must not be too old such that their content is dated; 2. They must be in a language whereby they can be read by the local population; 3. Curriculum issues should be considered such that the books are integrated into classroom studies; 4. The types of books (i.e. textbooks vs. readers) provided should match the needs of the local school or community; and 5. The context of books provided should not be so Eurocentric that they are not useful to African populations. Second, access must be provided to ensure that even if the books are useful, they are: 1. Made available in a proper library or school setting; 2. Students and the community have access to the library and the books; and 3. Home use is provided in an ideal setting thereby allowing students and the community to read books for longer periods in home settings. Third, success of these programs in a larger sense depends upon the extent to which models are scalable. Thus, in determining whether donated book projects driven from Western sources is an Africa-wide solution, one must ask whether sufficient donated books are available in the West to meet the needs of some 400 million African children across the continent. Additionally, the cost of providing these books either from donated sources or from printing these books must be taken into consideration to determine if sufficient resources are available.

Implications of the findings in this analysis are that providing English-language textbooks from the United States increased levels of literacy in selected schools in Tanzania and elsewhere in Africa. This finding supports development goals such as the Millennium Development Goals (UN Millennium Project, 2006) and international economic development

goals such as those put forth by the World Bank (1987, 2002). If there is a link between education and economic development, and if there is a link between literacy and education (both of which premises are supported in the international development community), then the implications of this analysis are that book donation programs of the type used in this analysis do positively impact economic development in the developing world. In short, books promote literacy, which promotes education, which promotes rural and urban economic development.

Since this was one of the first analyses of its type, it is recommended that additional investigations be conducted that examine the same and related questions with populations of students in Tanzania, and other developing countries in Africa. In addition, it is recommended that development professionals use the findings of this and other studies as part of the rationale for sending additional English language books to Africa. The potential for extremely effective and low-cost development gains through book donation programs appear substantial and merit further investigation, scrutiny, and potential investment by the development community.

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