Bhola's total literacy system

Application to SIL literacy programs

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[Topics: literacy program planning, subsystem model of literacy]

1. Introduction

The literacy system compiled by H. S. Bhola appears to be quite comprehensive. In his unpublished manuscript "A source book for literacy work: Perspective from the grassroots" he claims this system is applicable at the grassroots level of literacy programs. This total literacy system addresses all levels of involvement from national government to the teacher in the local village. Bhola's system was written from the viewpoint of working through the national government in setting up literacy programs.

It is our purpose in this article to apply Bhola's total literacy system to literacy programs in the context of a nongovernment organization (NGO) since most NGOs work at the grassroots level. Using data gathered in research, this article will attempt to determine if Bhola's system is a useful tool for the development of healthy literacy programs and projects under the auspices of an NGO. The NGO that will be focused on is the Summer Institute of Linguistics (SIL). For the purposes of manageability our study will consist of a

sampling of SIL literacy programs in the country of Papua New Guinea (PNG) only. The literacy programs used were mother tongue literacy for adults, children, or both.

In this study, a healthy or effective literacy program is defined as one that is either ongoing, expanding, or run by the national people.

Bhola's total literacy system is viewed as a descriptive and analytical system. It basically describes the components of a healthy literacy program and analyzes each one with the intent of guiding others as they develop their own projects and programs.

The data gathered indicates which components of Bhola's total literacy system are present or absent in each program and who is involved in the planning and the implementation of each subsystem. This article will discuss whether presence or absence of subsystems determines a healthy literacy program. It will also discuss other factors that directly influence the implementation of some subsystems and the effectiveness of a literacy program.

2. Background

2.1. The total literacy system

Over the years adult literacy projects, programs, and campaigns in developing countries have had a tendency to be as diverse as the cultures in which they have been initiated. Yet those literacy programs which have been effective appear to have certain components in common.

Various organizations (such as UNESCO and Peace Corps), governments, and education systems have developed statements of literacy and program guides in an attempt to create effective literacy programs. Unfortunately, these have been highly theoretical and have not been directed at the people actually carrying out the literacy projects at the grassroots level. They look good in theory but are not successful in practice for a wide range of literacy projects and programs.

Dr. H. S. Bhola has presented a comprehensive literacy system which he claims can be understood and applied at the grassroots level of most literacy projects. Though many literacy projects are implemented locally on a small scale, he "shows that an effective literacy system is often large both in size and scope" (Bhola 1994:173). This indicates that people outside of the community, that is, supervisors, specialists, and government officials, will be involved in an effective literacy project. The focus is on the "big picture" and shows the teacher where he fits into this system giving him a better understanding of his role in the literacy project. This system gives a comprehensive view of "all the requirements for the successful implementation of a literacy initiative" (Bhola 1994:174).

The total literacy system consists of 11 subsystems which are briefly explained below.

The IDEOLOGICAL SUBSYSTEM clarifies the basic purpose of the literacy program. Bhola cites only cultural and economic ideas and how they relate to the politics of the country. This article contends that this can also be expanded to include spiritual goals since many NGO s and communities base their literacy programs on these goals.

The POLICY AND PLANNING SUBSYSTEM converts the ideologies into literacy policies and initiates planning of a program within a time frame.

The INSTITUTIONAL AND ORGANIZATIONAL SUBSYSTEM implements the policies developed in the second subsystem above. Structures are put into place to enable teaching functional literacy, establish new roles, and establish interfaces with other ministries and departments.

The MOBILIZATION SUBSYSTEM focuses on maximum involvement of the people. Motivation of teachers, students, and community is essential for commitment of resources to keep a literacy project going.

The PROFESSIONAL SUPPORT SUBSYSTEM provides professional support to the literacy system for training, evaluation, and research.

The CURRICULUM DEVELOPMENT AND PROGRAM DEVELOPMENT SUBSYSTEM makes decisions on what will be taught, when and where it will be taught, who will teach, and what are the desired effects. Program delivery takes place within this subsystem.

The MEDIA AND MATERIALS SUBSYSTEM determines where materials will come from and what kinds of materials are needed for both student and teacher. It also explores what is available from inside and outside the community.

The TRAINING SUBSYSTEM prepares teachers, supervisors, and other program personnel for their roles in the system through preservice and in-service training programs.

The TEACHING-LEARNING SUBSYSTEM delivers the literacy instruction. This is the heart of any literacy system for this is where the success of the program is determined. A literacy program with this subsystem firmly in place will produce literate people.

The POST-LITERACY SUBSYSTEM is responsible for maintaining ongoing literacy among adult literates in the community and providing uses of literacy in many aspects of daily life.

The EVALUATION SUBSYSTEM insures that all decisions are informed decisions through the collection of descriptive and evaluative information. This is carried out at all levels of the system from the student to the evaluation specialist.

It is important to note that these subsystems work together and overlap in many areas. Bhola acknowledges that this is an "ideal-type" system (1994:20) and that all literacy projects, programs, and campaigns do not have all of these components. He also recognizes the need for adaptation in individual projects and programs.

2.2. Adult literacy in Papua New Guinea

Adult literacy projects have been carried out in various areas of Papua New Guinea since the 1870s. For the most part they have been initiated under the sponsorship of NGOs. Adult literacy falls under the nonformal education sector in the Papua New Guinea government and has not been a priority until just very recently. In 1989, the national government began seriously formulating a program to organize national, provincial, and local awareness for a combined effort to eradicate illiteracy within PNG.

Government sponsored programs in the past were plagued with numerous organizational and financial problems (Education Sector Study 1991:3). The recommendation for dealing with the problems of government sponsored programs and the diversity of programs is to decentralize nonformal education. Thus provincial governments would have total responsibility for adult literacy programs with the possibility of funding at the national level (Ministerial Committee Report 1986:42–43).

Conservative estimates tell us that in 1990 there were 79 literacy programs for adults with 258 classes (Education Sector Study 1991:6). Another estimate states that in 1988 over 200 literacy programs had been established in PNG (Malone 1991:1). This estimate most likely includes children's literacy programs. These programs are community-based literacy programs made possible by NGOs and the provincial governments with support from the Department of Education.

The most successful programs have been those run under the guidance of NGOs. "The Summer Institute of Linguistics has promoted rural development and adult literacy for three decades in all parts of Papua New Guinea" (Education Sector Study 1991:2). It is obvious SIL is well established in PNG and has continued to develop effective literacy programs primarily at the local level due to the government's focus on other priorities over the years.

With a renewed interest in adult literacy and vernacular literacy for all ages by the national government the literacy department of SIL in Papua New Guinea is currently involved in shifting its focus to the "big picture" and becoming a part of larger scale programs and campaigns. The focus of this article, however, will continue to be the work of SIL in literacy programs at the community level. Even though it operates as one organization, each literacy program is unique due to the diverse circumstances in each situation.

3. Questions addressed

A number of questions need to be addressed in order to determine if Bhola's total literacy system is a useful tool for the development of literacy programs sponsored by SIL. This study will focus on the following questions:

- Can Bhola's literacy system be effectively applied to literacy projects and programs sponsored by a NGO, for example, SIL?
- Are all the subsystems, cited by Bhola, currently being implemented in SIL literacy programs? If not, are these programs healthy?
- Are all the subsystems necessary for a healthy program?
- Is there a pattern as to which subsystems are missing in different programs?
- What are the consequences of missing subsystems?
- Are any subsystems more critical than others?
- Should any modifications or new subsystems be added to Bhola's total literacy system?

- Are there other factors, not included in Bhola's system, that will affect a literacy program either positively or negatively?

4. Subjects

Eight literacy or translation teams were randomly chosen to be interviewed concerning their literacy programs. Seven were used, since one team had not yet set up a literacy program. All the subjects have worked in Papua New Guinea with SIL for a minimum of one term (four years). They have all had experience at the grassroots level in a literacy program at some stage. The size of the language groups and the various locations of these programs reflect the great diversity of people, cultures, and terrain in Papua New Guinea. Chart 1 in Appendix B summarizes the background information collected on each subject.

5. Method

Data was collected by personal interview either face-to-face or by telephone. Each interview averaged two to two-and-one-half hours in length. A questionnaire was designed with questions based on the eleven subsystems of the total literacy system in Chapter 11 of the source book (Bhola 1994). Questions were then categorized under these 11 subheadings. The questionnaire contained 56 questions (see Appendix A). This questionnaire provided adequate information for the interviews to determine the following:

(a) Which subsystems were planned in the programs

(b) The extent to which these subsystems were actually implemented and are ongoing

(c) Who else was involved and how they were or are involved in the program

Upon inquiry, it was found that none of the subjects were familiar with Dr. Bhola's total literacy system. This may have been an advantage. Without prior knowledge of Bhola's system, the subjects gave answers objectively. They did not attempt to fit their answers into any preconceived categories. Any additional information acquired during the interviews regarding such things as culture, history, populace, and attitudes was also noted and used as needed for the purposes of our study.

6. Data and analysis

In the seven SIL programs that were studied there is great variation as is evident from the charts. To understand and analyze all factors which might account for this is beyond the scope of this article. However, there are factors which are quite evident and deserve attention. The charts, while quite clear, are limited in that they may not show the variation within a particular category, nor do they explain factors which have impacted the program. Some further explanation about the programs is therefore included in the discussion.

Chart 2 (in Appendix B) basically consists of an overview of the extent to which Bhola's system has been utilized by seven SIL programs. While all the subsystems were not planned and implemented in all

the SIL programs, every subsystem is represented in at least some of the programs. Considering that the translators and literacy workers are not acquainted with the Bhola system and did not plan according to Bhola's total literacy system, the fact that all subsystems are represented demonstrates the validity and necessity of each one.

Program A began recently. Although literacy classes have been held, the policy and planning subsystem is still only partially implemented. Curriculum has not yet been developed, but some primers have been produced and a writers' workshop was held. The institutional and organizational subsystem will develop as the program grows. However, careful planning is needed to insure the local people see the literacy program as their own for it to become an institution within their culture. In this program the literacy workers were told there was already high motivation for literacy prior to the team's arrival. Therefore, as the chart indicates, no plans for a mobilization subsystem were made. The apparent high motivation may be more a perception on the part of expatriates than a deep conviction among the local people. The mobilization subsystem should be given particular attention as it may be crucial to the ongoing success of the program.

Program B also began recently. As the chart indicates, more thorough planning was carried out in Program B than was done in Program A. All but one subsystem is currently planned. The postliteracy subsystem does not appear to be necessary for initial commencement of this program but will be added as the program continues to develop. The fact that evaluation is already planned is further evidence of careful and thorough planning.

Program C is well established as evidenced by the completeness of the chart. All subsystems were planned and have been fully implemented. This is a good example of a small NGO program that comprehensively incorporates Bhola's total literacy system. Early in the program development a liaison was made with a community leader. A committee was formed with key people from three local institutions. Goals were developed with planning and implementation thoroughly defined. Mobilization spread from local and provincial levels on to the National Department of Education. Local instructional materials were prepared through community supported teacher training and curriculum workshops. The community experienced personal involvement and supported the literacy program.

Program D is particularly unique from the other programs. This program began through a request for the translator to assist an established education institution. The translator was asked to implement a vernacular literacy program. While Program C is in many ways a complete model of Bhola's system, Program D, by its very nature, cannot follow the pattern of the comprehensive Bhola system. The chart shows that only five of the eleven subsystems are present. Yet, that is probably quite adequate for this program. In reality many, if not all, of the other seven subsystems are present in the already-established educational institution.

Program E is strongly similar to Program C. It has all of the subsystems present, and this literacy program is well-established. Public relations is a unique characteristic of this program. For several years prior to the establishment of a literacy team to the region, the translator developed extended, positive relationships throughout the community and province. A strong local community school system had also been well-established. The provincial Minister of Education was actively involved. The literacy team was able to

build on a strong foundation that led to extended professional support. Training strengths led to positive teaching and learning attitudes and provisions.

Program F is also an established program. It includes a community development component. All subsystems were planned, and all are implemented as the chart indicates. There is some justification for the four subsystems which are only partially implemented. The professional support subsystem has not been fully implemented, because the people prefer to do it themselves. There is professional support available if it is required. A lack of materials is the main reason the media and materials subsystem and the teaching-learning subsystem are not fully implemented. This program is now completely run by the people and the postliteracy subsystem is fully implemented by the people. However, there is less concern for ongoing literacy related issues, because literacy has become a well-established institution within the culture.

Program G was initiated somewhat reluctantly due to the fact that a program was already in place through another institution. Program G was not established in the community and the program is no longer operating. The chart shows that only four subsystems were planned. Although each was implemented, only two were fully implemented. This program was operated primarily by the translator with minimal community involvement. There was no mobilization subsystem to generate interest in vernacular literacy. Many of the people were already literate in the language of wider communication (LWC). Being literate in the LWC made the people question the need to read in the vernacular. This is a problem that is common in some sections of Papua New Guinea.

When Chart 2 is examined as a unit and the subsystems are seen across the programs, a pattern can be observed as to the subsystems missing in the programs that are not healthy or firmly established. Mobilization is neither planned nor implemented in programs A, D, and G. The teaching-learning subsystem has not been planned or implemented in programs D and G and only partially implemented in program A. The postliteracy subsystem appears to be the weakest one. It was not planned or implemented in programs A, B, D, and G. (It needs to be noted, however, that program A is partially implementing postliteracy, and the situation in program D indicates that another institution has implemented this subsystem.) It is also evident in these programs that evaluation was not planned or implemented.

Chart 3 (in Appendix B) organizes the information from Chart 2 in a way that presents a correlation between the number of subsystems present and the status of each program. This chart indicates that a complete and ongoing program most likely will contain all 11 subsystems. It would appear that any program with less than seven of these subsystems would not be a healthy literacy program. It can be observed that the programs with less than seven subsystems are either part of another entity (program D) or are no longer functioning (program G).

While all subsystems of the total literacy system are used in SIL programs, there is a noticeable variation in the overall emphasis these subsystems receive. This is illustrated in Chart 4 (in Appendix B) which graphs each subsystem as planned and implemented by each literacy program. It is apparent that many more programs plan for subsystems than actually implement them. However, some subsystems are not even planned. For example, the postliteracy subsystem is planned in only three out of seven programs. Regarding mobilization, Bhola states, “A mobilization subsystem is necessary but is often neglected” (1994:187). This is reflected in the graph which shows that only four out of seven programs planned for a

mobilization subsystem. The subsystems that were given the most emphasis in the planning stage in the programs were ideological, policy and planning, programming and curriculum development, media and materials, and training. The subsystems that are particularly weak are mobilization, postliteracy, and evaluation.

The analysis of these seven SIL programs included charting the various individuals and institutions involved in each subsystem. A compilation of this information is contained in Charts 5 and 6. These charts illustrate the point made by Bhola that an effective literacy system is often large in size and scope. The charts include the government, NGO, translator or literacy worker, community, teachers, students, and local church. These charts are by no means exhaustive, but give an adequate picture of the entities involved in a literacy program. When the charts are examined, either in actual numbers of entities involved (Chart 5 inAppendix B) or as a percentage (Chart 6 inAppendix B) there are significant variations.

Generally, the government is not heavily involved in SIL programs. One exception is in its involvement in the policy and planning subsystem for some programs. Extensive communication between the government and SIL does not normally take place in local village programs. In many cases, the government is informed but not directly involved in the literacy program. The NGO plays an important role in some of the subsystems. Their strongest influence comes in the planning of the subsystems most crucial for the setup of a literacy program.

The translator or literacy worker is the one most heavily involved in all aspects of the program. One reason for this is that he or she is the person who deals with all levels of communication from the government to the people in the village. The subsystems in which the translator or literacy worker is most active are programming and curriculum development and media and materials subsystems. Following that are the ideological, policy and planning, and the evaluation subsystems. Another reason the translator or literacy worker is highly involved in these particular subsystems is that they require academic expertise, and due to the focus of his or her training he or she would feel more comfortable with these areas.

Community involvement is apparent in some of the programs and hopefully will be expanded over time. Community involvement in subsystems, such as mobilization and teaching-learning, may prove very beneficial to the ongoing success of the programs. The teachers are basically concerned with the subsystem that directly affects them, that is, the teaching-learning subsystem. There are programs where the teachers are taking some of the responsibility for their own advancement. It is interesting to note that the students are not highly involved in any of these subsystems. This is an indication that the programs may need to work on including the students in some of the subsystems to make the total literacy system more effective at the grassroots level. Involvement and feedback from students is the most effective way to continue to meet felt needs and to evaluate if they are being met. Though lacking in many of these programs, local church involvement is significant for a number of reasons. First, PNG has a strong spiritual emphasis both in society and in government, so it is quite natural for the churches to be involved in literacy programs. Second, the church is often the center for activities in a community, and church facilities may be used for literacy classes. Third, the local church may be the institution that initiated the request for a literacy program.

This analysis is not complete by any means. It does, however, illustrate certain trends and patterns both in how Bhola's system fits into SIL programs and in pointing out the strengths and weaknesses in SIL programs.

7. Discussion

It is clear from the data and the analysis that Bhola's total literacy system can be applied effectively to literacy projects and programs sponsored by an NGO. The total literacy system is comprehensive enough that, used as a tool to plan a literacy program, it allows for adaptations to accommodate the unique qualities of individual projects and programs.

In light of the fact that this system is being explored from a slightly different perspective than Bhola, that is, being outside the government with a different emphasis, some modifications to the total literacy system seem appropriate. A public relations subsystem would be beneficial for NGOs or any other outside organizations attempting to set up literacy programs. The public relations subsystem should be singled out as a separate subsystem, because it is so crucial to establishing credibility with the people, institutions, and government. The literacy programs that are the most effective in this study are the ones which actively sought out government officials, community and church leaders, and local institutions and then established positive relationships with them long before they began their literacy programs. Keeping people informed from the village to the provincial offices laid a foundation of mutual trust and cooperation. Normally, in SIL, the organization plays a major role in public relations, but in the cases of programs C, E, and F the translators or literacy workers themselves developed public relations with the people. This aspect of their work played a key role in the success of their literacy programs.

Literacy work can benefit tremendously from effective, carefully planned, and focused public relations. Programs that cited strong public relations as an active component also showed program stamina and marked enthusiasm. Public relations not only spreads literacy awareness, but it can add directly to program professional development and support as networking expands to reach all levels of function. Team E reported their provincial leaders had heard of the success of mother tongue prep school children in primary school in the North Solomons, East New Britain, and East Sepik. The provincial Minister of Education had been apprised of literacy work by Team E in his mother tongue. Team E was asked to help organize a pilot program for the entire province.

Another area neglected in Bhola's system was that of ownership by the people. Much was said in his book about ownership in terms of the government, that is, national, provincial, and local. However, it is not the contention of this article to consider the ownership by the national government of a program to be synonymous with ownership by the people. This is especially true in a country as diverse as PNG. Literacy programs differ greatly from one community to another depending on a variety of outside factors. Literacy must be relevant to the people, or it will not happen. The government having a program does not necessarily make it relevant at the local level. There is a pattern of higher success rates among NGOs in their literacy programs. It is most likely due to the fact that they work at the local level, and they address the felt needs of the people.

The existing subsystems all seem to be critical to a healthy literacy program. As seen in the analysis of the charts, the healthiest programs (C, E, F) contained every subsystem, not only in planning but also in

implementation of the program. Timing would be the relevant factor in determining which subsystem is more critical than the others. From this standpoint, each subsystem would be the most critical at different times in the course of the program. At the beginning of a program, the subsystems involved in setting up a program would be most critical, such as, ideological, mobilization, policy and planning, curriculum development and training. Once a program is under way the most critical subsystems would be teaching-learning, mobilization, media and materials, and evaluation. Of course, this could change due to the needs in a specific program or to any number of outside factors. It is important to keep in mind that these subsystems overlap and work best in conjunction with one another.

The data shows that the presence of all subsystems indicates a healthy or effective literacy program. But it would be difficult to determine if all the subsystems are **necessary** for a healthy program without further study. Program F is an example of an effective literacy program that has planned for all the subsystems but is not fully implementing them. Program B gives the indication that it is on the way to becoming an effective program, but it is too early for a definitive conclusion since this program is only beginning. Also, a number of outside factors are impeding progress, that is, isolated location, lack of motivation among the people, and lack of community cooperation among themselves.

As noted earlier, there was a pattern to the subsystems missing in the unhealthy programs and the fledgling programs. Some serious consequences could arise if these subsystems are not incorporated. If mobilization is not implemented, the people will not attend. Motivation is a key factor in any learning situation, and if it is not maintained or enhanced people lose interest and drop out. This applies to teachers also. If they are not motivated they will lose interest in teaching literacy. The lack of this subsystem would most likely result in a dying program. The consequences of neglecting the postliteracy subsystem would be an end to a literacy program. Plans must be made for the continuation of literacy in a community in the initial stages to ensure ongoing literacy. It is not a one-time activity; literacy is a lifetime activity. To keep a literacy program alive, appropriate materials and institutions must be implemented and established into it. Evaluation should be ongoing, not just an exercise at the end of a program. With proper evaluation by individuals at all levels continuously throughout the program, one sees a program that remains relevant and appropriate for the people. The consequences of omitting this subsystem would be a lack of improvement or adaptation in the program and a program that becomes obsolete or stagnant.

7.1. Other factors

Through personal interviews with the teams presented in this article, the presence of other factors was seen to affect the health of a literacy program. These factors can be historical, social, political, economic, or cultural by nature of definition. These factors fell into two broad categories which had either a positive or negative influence on the literacy development. The positive factors will be addressed first.

Several teams reported that programs were initiated due to community requests for reading skills that people could then apply to reading Scripture. The presence of an active local church supported the desire for Scripture reading. Socially, the elders and the pastors in the church wanted to be able to read mother tongue Scripture aloud during the church services. Women also asked for reading in order to participate in ladies fellowship Bible studies.

Programs that are healthy today began early on with strong feelings of local ownership. Teams C and E credited establishment of a local committee by the village leaders, **not** the translator or literacy specialists, as an initial step towards community ownership. Each committee was locally organized with members designated through traditional leadership appointment. The SIL translator and literacy workers were appointed to the team by the village elders. Group consensus formulated goals and policy. Program planning and development were carried out through the committee. Teacher selection was the responsibility of village elders. Teacher or supervisor training was delegated to SIL. The teachers became sources for curriculum design and program evaluation. The people themselves took ownership for the material's content and preparation. While not every team in the study reported this depth of local ownership, each team noted a direct relationship between the health of the literacy program and the degree of local ownership perceived.

The location of a community school in the area was considered to be beneficial to literacy program growth and interest. Networking and literacy awareness support were available. Team F reported the presence of the local school gradually led to the development of an effective adult women's literacy program. Mothers wanted to help their children with their work to encourage school progress. The program had addressed children's literacy needs. The presence of a local community school can stir families to desire mother tongue education for their children prior to entering school. The school presence also has been seen to stimulate adult literacy. The location of a school within reasonable distance to a community-based literacy program can be an effective contributor to program strength.

During the mid 1980s, a crop-killing frost precipitated famine among the people working with Team C. The team responded through humanitarian efforts. As a result, a large scale food air lift was organized. The team's response to a naturally caused health and economic crisis brought deep bonding and trust to relationships with the people. Positive relationships such as this could normally take years to develop. Positive ongoing cooperation generated through the situation response spurred interest for working together in a mutually beneficial atmosphere. The climate of mutual cooperation carried over to help set the stage for a vigorous literacy program.

Meeting expressed felt needs was shown to strengthen literacy programs in several team efforts. Team C began a health clinic to care for pressing basic physical problems, and people were trained to assist. Preexisting economic needs provided Team E with an avenue for developing adult literacy. The team worked with community leaders to organize evening classes in bookkeeping, accounting, and managerial skills. Curriculum and lesson activities were built around an interest to learn these skills. Team F responded through a community development project. Men were taught saw mill and construction skills. Some of the men were trained in supervision.

Up to this point, positive factors have been addressed. Other factors exist that negatively affect literacy programs. A local community school closure has drastic implications. A school closing can precipitate loss of drive and motivation within the community. Team A stated a school closure had a direct negative effect upon the planned children's prep school program. The school closed due to lack of teachers. There was now nowhere for the children in the prep school to go the following year. The community leaders canceled the literacy program. The impact of the local institution's demise directly affected the literacy program.

Literacy goals that are unrealistic or unclear can discourage motivation. The literacy goal can be overshadowed by the desire to learn to read to gain employment. Increase in job skill development, when perceived as a goal for attainment of reading skills, has built-in dangers. This is especially true in Papua New Guinea, where few jobs are available and wages are low. Young men who become literate often move to town for jobs, only to become discouraged when unemployed. Parents then become angry because the goal of reading to obtain a job was invalid. The dream of literacy as a means for employment is best left out of program goals and literacy promotion plans. Literacy curriculum that fails to respect and affirm traditional culture in curriculum can be detrimental to self-worth of the individual and cohesiveness of a people. Clear, accurate literacy needs must be expressed in understandable goals. Team G had unclear program goals that contributed to a breakdown in communication and ultimately the end of the program.

Geographical location of a language group was seen to have significant impact. Isolation impedes literacy awareness and interest. This has been a major factor in the programs of teams A and B. Communication with people from other areas is restricted due to difficulty reaching the areas. Isolated groups contend with issues such as decision making, committee process, and networking (Havelock and Huberman 1977:54). Location holds serious aspects to be considered in relation to program planning for effective literacy. Team A found isolation to be detrimental to literacy promotion. Little news was shared with outsiders, and the need for reading was perceived to be very weak. Awareness of reading value was slow to emerge and is in the initial stage in both Teams A and B. Transportation is also limited which directly affects access to materials and resources. Government support and involvement is almost nonexistent due to the isolation of these language groups.

Effective literacy programs happen best when people want to learn to read. The attitudes people have affect motivation and cooperation. Literacy must be relevant. Because literacy in the vernacular was not a felt need among the people, the program developed by team G was not relevant to the community. Team G cited lack of interest for reading as a cause of program failure.

Funding sources have also been reported to be a factor contributing to program demise. Team B stated a marked change in people's motivation, ownership, and cooperation when the government stepped in to partially fund literacy. People lost the incentive of working for a goal and were content to let the government do the work. Trust for the government payment is weak, because teachers have been known to go without salaries for months. Dissatisfaction and disappointment can lead to anger which stifles ambition and willingness to learn.

7.2. SIL's role in Bhola's system

Evaluation of subsystem responsibilities shows that SIL, as an organization, fulfills certain aspects of some subsystems. The team member contributes complementary aspects as needed to complete the whole system. As an NGO a policy statement and clarification must be prepared that meets national directives and allows for team freedom to state local policy. As an institution working within Papua New Guinea, SIL leaders work to strengthen institutional aspects of the organization. The teams work within that structure.

Mobilization efforts reach across well-established networks throughout the country at all levels with national level public relations within the domain of the leadership. The authors of this article want to encourage the leadership of SIL to broaden their training of members in public relations.

Professional support is continually developed by the leadership for the mutual benefit of both organization and team members. Workshops are frequently sponsored by SIL for national professional development. Regional classes reach multilanguage groups with writer's workshops and teacher training. Team members also contribute professional development at the community level.

Consultants work to develop expertise within media and materials. As NGO funds are available to contribute to exploration and pioneering in use of print and nonprint media, they are used to promote and plan for literacy. Team members access findings for application to the local level projects and programs. Experts also work to research and implement evaluation at all levels. It is suggested that SIL provide more extensive training to team members in the evaluation subsystem. Evaluation covers a broad area and is a valuable contributor to literacy program effectiveness and health.

8. Conclusion

This article has addressed the application of Bhola's total literacy system to a sampling of literacy programs under the direction of an NGO, namely SIL. Despite the fact that a wide variation within individual programs was discovered, there were some common components across the programs. These components can be identified with Bhola's eleven subsystems. The analysis shows that the most effective programs contain all eleven subsystems indicating that his system is fairly complete and applicable to all literacy programs. In the healthiest programs all subsystems overlap and work in conjunction with each other.

For study beyond the scope of this article the following areas merit attention:

- What is the relationship between community development and an effective literacy program?
- What is the effect of mother tongue literacy on local institutions and organizations?
- How does effective mother tongue children's literacy impact formal education curriculum?
- How have new roles developed in literacy programs affected traditional society?
- How do traditional leadership styles affect literacy planning and evaluation?

Further in-depth study of each subsystem would be beneficial to the credibility of this system in various literacy programs. Testing the completeness of this system with a larger sampling of programs through surveys and observation would help verify the results of this study. These topics and questions arose in the course of the interviews and were confirmed as relevant during our postinterview evaluation.

Appendixes

Appendix A. Interview

A.1. Background information (variables)

1. Name of translator
2. Name of language group
3. Location
4. Size of language group
5. Length of time in program?
6. Was there a prior team? Another NGO?

A.2. Ideology

1. What is the underlying purpose or goal of your literacy program?
2. In your understanding, what are the national goals for literacy?
3. a. Is anyone else involved in the planning of the literacy program? (government, local committee, and so forth)
   b. What is their purpose for the program?
4. Are the goals of this program clear to others?

A.3. Policy and planning

1. Who establishes the policies of your program?
2. Is it clearly defined?
3. Have limitations or requirements been set by outsiders (funders and so forth)?
4. Are you working with community schools?
5. Do you have a definition for functional literacy for your program?
6. How are priorities set in your program? (Who? When?)
7. Were new roles created in your program (that is, preschool teachers, supervisors, bookkeepers, writers, and artists)?
8. From where are you obtaining educational resources? (Local or outside?)

9. What kind of technology have you planned to use or are using?

A.4. Organizational and institutional

1. What institutional structures already exist? (Church, school, community development, or aid posts?)
2. Which institutions will be affected by your program? How?
3. Is your program being set up the way you had planned?
4. Have you made any ongoing changes in the plan? If so, by whom?
5. What do you have sustain your literacy program? (Print shop, library, and so forth)
6. Do you have a local advisory committee to deal with problems? Who is on it?
7. Are you working in conjunction with the formal education system?
8. What is your time frame for classes?

A.5. Mobilization

1. Who attends literacy classes?
2. What motivates them?
3. How do you plan to motivate others? What has been successful?
4. How has the program impacted individuals (including teachers)?

A.6. Professional support

1. Are other professionals involved in this program? How are they involved?
2. How do they contribute to the program?
3. Are you current in what's happening in literacy education? Do you receive professional materials?
4. Is it necessary to have a professional network you can contact?
5. What input have other professionals given to your program?

A.7. Programming and curriculum development

1. How was your curriculum developed?
2. What or who influenced the decisions?

3. Who else worked on curriculum development (local, regional, and national)?
4. What aspects of the curriculum introduce changes in the local culture?
5. Is community development (economic development) a major goal or objective in your curriculum? In what practical ways will you meet this objective?

A.8. Media and materials

1. Are women reflected in your materials?
2. How do you acquire your materials (locally or outside)?
3. What materials do you use?
4. Is any other media available for the literacy program (that is, radio, video, cassette tapes, film, or slides)?

A.9. Training

1. Who needs training in addition to teachers?
2. Who chooses the teachers to be trained?
3. Describe the training (length of time and so forth).
4. What qualifications do you and the community require of teachers?
5. What responsibilities should a teacher be trained for besides teaching?

A.10. Teaching-learning

1. Are the teachers enthusiastic about the content of the curriculum?
2. Do they show interest in self-improvement?
3. How do the teachers motivate their students?
4. How do the teachers respond to the pressures of village and program expectations?
5. Do teachers interact (liaison) with village leaders?

A.11. Postliteracy

1. What plans are there for ongoing learning and literacy?
2. Has a library, print shop, and so forth been developed to ensure continuation in literacy?

A.12. Evaluation

1. Was a needs-assessment made prior to literacy?
2. Were the goals achieved?
3. How has your program been evaluated? By whom? (Students, teachers, supervisors, branch, government, or funders?)
4. What impact has the literacy program had on the community (women)?
5. What parts of the program have been evaluated? How?

Appendix B. Charts

Background Information				
Literacy program	Size	Years in program	Prior literacy exposure	Target group
A	3,500	2	yes	adults
B	2,500	5	no	children
C	35,000	5	yes	children
D	7,000	22	yes	children
E	6,000	8	yes	children and adults
F	9,000-10,000	9	yes	women and children
G	2,200	14	no	adults and children

Chart 1 Background information

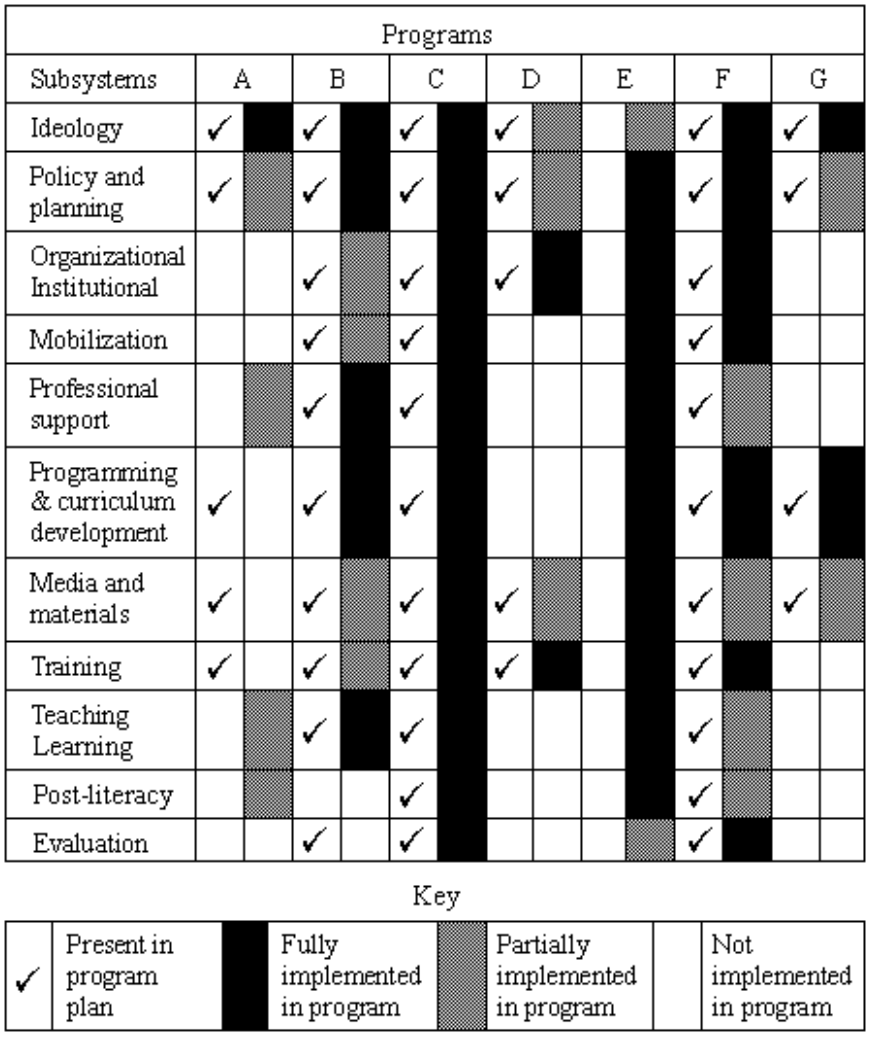

Chart 2 SIL programs and Bhola's system

Program	Number of subsystems present	Current status of program
G	4	never actually established; no longer functioning
D	5	not autonomous; integrated in established education system
A	7	not fully planned; recently initiated; struggling
B	9	recently initiated; still getting started
F	11	well established; on-going
E	11	well established; on-going
C	11	well established; on-going

Chart 3 Correlation of subsystems and current status of programs

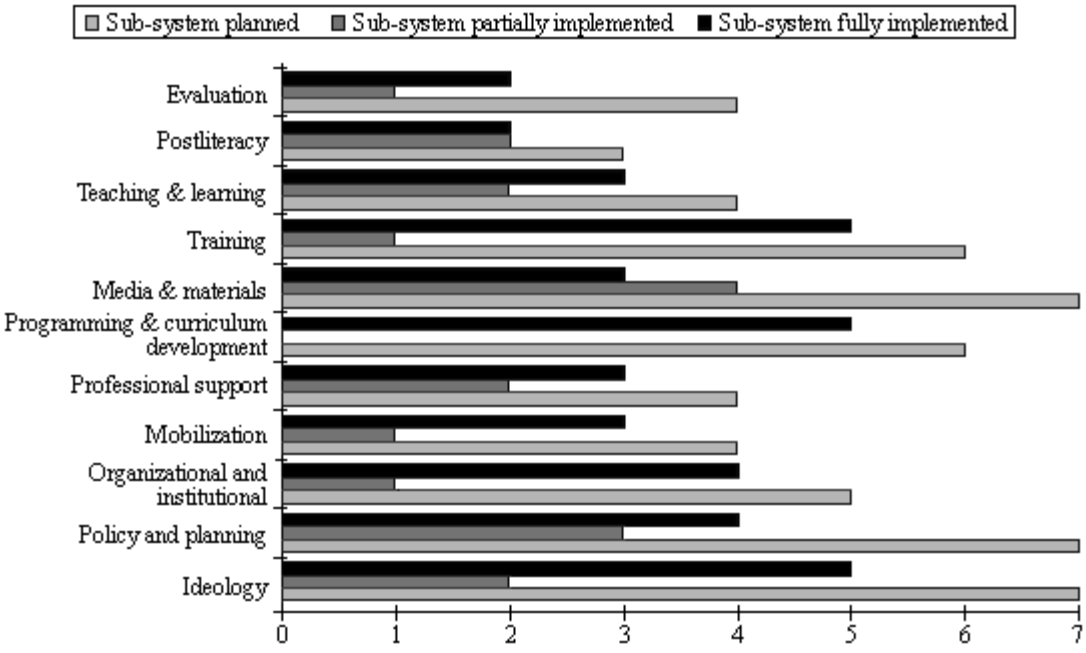

Chart 4 Subsystems in SIL programs

Groups involved in program														
	Government		N.G.O.		Translator literacy		Community		Teachers		Students		Local church	
Sub-system	P	I	P	I	P	I	P	I	P	I	P	I	P	I
Ideology	1	2	4	4	6	5	4	3	2	1	0	1	2	3
Policy and Planning	3	4	4	3	5	6	4	4	1	0	0	0	1	2
Organizational Institutional	3	3	5	4	4	5	4	2	1	2	0	0	2	3
Mobilization	1	0	3	1	4	3	4	4	0	3	0	0	2	3
Professional support	3	1	6	3	4	4	1	1	0	0	0	0	1	3
Programming and curriculum development	1	0	2	3	6	7	4	2	3	3	0	0	2	2
Media and materials	1	0	3	2	7	7	4	2	3	3	0	0	2	2
Training	0	1	3	3	3	4	4	3	3	3	0	0	1	2
Teaching Learning	0	0	1	1	2	3	4	4	4	5	0	2	1	2
Post-literacy	1	1	2	3	3	3	3	3	2	3	0	0	1	1
Evaluation	2	2	3	3	5	6	5	2	3	3	1	1	2	1

Key: P = involved in planning I = direct involvement

Chart 5 Group involvement by subsystem (planning and direct involvement)

Groups involved in program														
	Government		N.G.O.		Translator literacy		Community		Teachers		Students		Local church	
Sub-system	P	I	P	I	P	I	P	I	P	I	P	I	P	I
Ideology	14	29	57	57	86	71	57	43	29	14	0	14	29	43
Policy and Planning	43	57	57	43	71	86	57	57	14	0	0	0	14	29
Organizational Institutional	43	43	71	57	57	71	57	29	14	29	0	0	29	43
Mobilization	14	0	43	14	43	57	57	57	0	43	0	0	29	43
Professional support	43	14	86	43	57	57	14	14	0	0	0	0	14	43
Programming and curriculum development	14	0	29	43	86	100	57	29	43	43	0	0	29	29
Media and materials	14	0	43	29	100	100	57	29	43	29	0	0	29	14
Training	0	14	43	43	43	57	57	43	43	43	0	0	14	29
Teaching Learning	0	0	14	14	29	43	57	57	57	71	0	29	14	29
Post-literacy	14	14	29	43	43	43	43	43	92	43	0	0	14	14
Evaluation	29	29	43	43	71	86	71	29	43	43	14	14	29	14

Key: P = involved in planning I = direct involvement

Chart 6 Percent group involvement by subsystem (planning and direct involvement)

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