

Armenia:



The Three Pomegranate Network (3PN) *Connecting a Society in Diaspora*

By

Anoush Kacherian, Anoush Margaryan, Robert Gabrielyan and Artavazd Mamyán

Project Description

The Three Pomegranate Network (3PN) of the Education for Development Institute is a global online learning program (<http://www.3noor.org>) that connects Armenian students and teachers throughout the world by engaging them in collaborative, project-based learning activities. 3PN was designed to act as a bridge between teachers and students living within Armenia and those living abroad in the Diaspora. The project facilitates access to Internet technology and provides Web-based learning activities focused on promoting critical thinking, awareness of cultural identity and access to key resources.

3PN was selected for study for two reasons: first, to see if it can serve as a viable model for connecting other cultures in Diaspora through well-designed Web-based learning activities; and second, because most of the training that teachers receive to participate in the project is provided on the 3PN website or through e-mail. If this form of training is effective, then it is assumed to be a cost-effective approach to train teachers, particularly those geographically dispersed.

Armenia is a small country of approximately 3 million people located in the southern Caucasus between Turkey, Azerbaijan, Iran and Georgia. Formerly part of the USSR, Armenia has seen a considerable decrease in funding for programs and innovations in education during the period of

transition to a free-market economy, and access to technology is scarce for both students and teachers.

The number of Armenians living in Diaspora is almost twice that of those in Armenia; and, for those living outside of the country, cultural awareness and ties to their national identity are important concerns. In different communities, numerous Armenian schools are operated, each with varying degrees of access to technology and training.

The desire to link Armenian students and educators around the world with each other and to resources and training on the Web was the motivation for a group of Diaspora Armenians to establish the Three Pomegranate educational project under the umbrella of the Education for Development Institute. Formerly known as the Narod Network Project, Three Pomegranate aims to connect the globally dispersed Armenian community through Web-based activities that provide academic, cognitive and technological training; strengthen awareness of personal heritage; and, create a forum for the exchange of ideas and the development of educational programs over the Internet.

By engaging in the 3PN collaborative activities, it is expected that students learn a range of skills and knowledge, including: researching on the Internet; using a range of computer applications such as word processing, e-mail and graphics programs; doing social science research, such as interviewing, documenting, summarizing and representing data; history; geography; writing; problem solving; critical thinking and teamwork.

Activities for the school year are introduced to students on the 3PN website with the help of Aren and Areni, a virtual boy and girl who reside on the site. For the 1999-2000 school year there were three collaborative learning activities. Activity I, entitled "Exploring Yerevan," helped students become proficient in the use of search engines on the Web, based on an exploration of the capital of Armenia through maps, landmarks, symbols, and literary references. The "Identity Game" challenged the students to discover the identity of others throughout the Three Pomegranate Network while disguising their own identity for others to guess. In the third activity, "Moving People," students chose and presented a local family and its migratory history. Innovative and engaging, these activities challenged students to use resources beyond the Three Pomegranate website and their own classroom studies.

Three Pomegranate uses the "we" approach to learning. Student teams are engaged in problem solving and are responsible for maintaining individual accountability, while promoting positive and supportive interdependence.

The program includes 70 schools from 16 countries, half of which are in Armenia. Five participating schools in Armenia were chosen for the case study - three located in Yerevan, the capital, and one each in the smaller regional cities of Gyumri and Vanadzor. One school in Yerevan and one in Vanadzor are enrolled in the program for the first year, while the school in Gyumri and another in Yerevan were enrolled for their second year and a third school in Yerevan for the third year. Of the five schools only one is equipped with a computer on-site and Internet access via radio modem. Students of the other four schools were transported by bus once weekly to various computer centers run by other organizations in their respective cities. Data were collected from these schools through interviews with teachers and students and observations of project and teacher training sessions between November 1999 and August 2000.

Participating students are 14-15 years of age and in 7th, 8th or 9th Grade. They are chosen by the program's teachers for their overall performance, academic record and

interests. Most of the students and teachers had extremely limited prior experience working with computers or the Internet, if any at all.

Teachers are not compensated for their participation and are generally chosen on the basis of their interest and desire to participate. For schools with programs in information technology, those teachers are chosen to participate. Computer literate coordinators act as intermediaries between the program and teachers. They conduct training sessions for the teachers in computer and Internet use, and are present at the learning sessions to render technical assistance when necessary.

Study Findings

Student learning. The impact of the Three Pomegranate program on students and teachers is clearly visible in the computer and Internet skills they acquire through participation in the project activities and exposure to recent information technology advancements. Students also acquire improved communication and teamwork skills, while developing critical thinking through exposure to broader topics of history, geography, culture, language, writing, graphic design, and basic interviewing techniques. The collaborative work mode encourages the development of communication networks and personal relationships with the Diaspora; and, creates an atmosphere of trust and camaraderie between students and teachers.

The general impression is that both students and teachers, as well as school officials, are mostly positive and enthusiastic about the Three Pomegranate activities and its outcomes. This project is recognized and appreciated as a unique chance for students and teachers in Armenia to access and gain experience in using computers and the Internet in education, while gaining exposure to their peers in the Diaspora, opportunities otherwise absent in Armenian schools.

Three Pomegranate uses the "we" approach to learning. Student teams are engaged in problem solving and are responsible for maintaining individual accountability, while promoting positive and supportive interdependence. Teachers serve as facilitators, and often learn together with the students. When students work cooperatively on the assignments, they further develop their social skills, such as decision making, and effective communication. Collaboration maximizes the learning process for each individual.

Teacher training. The professional training and personal qualities of teachers are considered crucial to successful implementation of the project. Important traits are moti-

vation, enthusiasm and openness to change, as well as flexibility in adjusting to new teaching methods and approaches. Most of the teachers selected were open to the facilitator role that the project required and, in fact, were already using this approach in their other classes.

Teacher training is an integral part of the 3PN program, although only a small part of this training takes the form of sessions involving an in-person trainer interacting exclusively with teachers. A significant part of the skills teachers acquire is imbedded in the design of the website and the structure of the projects and exercises. The main forms of teacher training include:

1. **Web-based instruction.** Web pages are devoted to specific topics, such as the use of search engines or the use of the Armenian alphabet in email messages. Also, Web-based directions specific to each exercise or project are designed to be instructive and thus provide a first level of training
2. **Online support.** The “Teacher Pages” section of the site offers a more interactive resource for teachers. The project organizers use this section to offer teachers guidelines on upcoming activities, as well as training on methodology and approach. Teachers also have an opportunity to interact with one another as well as with the coordinators through the Teacher Pages.
3. **Interaction with project coordinators.** During most sessions, a coordinator is present to assist students and teachers with technical issues as well as in understanding the details of activities and exercises. This effectively results in informal hands-on training for the teachers.
4. **Teachers as students.** The project activities generally are designed so that teachers participate along with the students. Although the teacher plays a facilitating role during (and especially between) sessions, there is nothing about the exercises that precludes teachers from active participation. This leads to a “learning-by-doing” situation for the teachers, just as it does for students.

No formal, in-person training is currently offered to teachers during the course of the school year. However, many teachers attend creativity sessions and technical sessions during the summer months in Yerevan, offered for the first time in year 3 of the program. In previous years, the training was limited to the four points mentioned above.

The concentrated weekly sessions have two important characteristics:

- They are project based, and are structured around a task such as the production of a Web-based newsletter. The product resulting from the training is intended to be a useful resource to be continuously maintained and updated during the following school year.
- These sessions happen after the end of the school year and are not intended to serve as basic training for first time teachers. Instead, they are a completion of the skills learned during the course. This is meant to make the training much less abstract for the teachers, who can now relate the skills they are acquiring to situations they encountered during the past year.

The fact that teacher training in 3PN is predominantly online or a by-product of participation in the sessions, means that only minimal costs are associated with training in the program. The only specific training cost, besides that incurred in designing the website, is for the summer sessions. Those costs are limited to the part-time salaries of project coordinators, in addition to the use of a computer center for several hours per week during the course of three months.

Regular meetings of teachers and Three Pomegranate coordinators and staff were particularly helpful in preparing teachers for their role and responsibilities during the academic year. Teachers used these workshop-type meetings to share experiences as well as act out simulations of real-life situations they experience in their daily work. As the year unfolded and the activities progressed there was constant feedback between the project management and teachers.

Can 3PN Serve as a Model for Other Cultures In Diaspora?

3PN links students and teachers in Armenia to students and teachers of Armenian descent around the world. Although the program has an important Armenian cultural component, it can be effectively applied to other cultures in Diaspora. The activities that students and teachers participate in throughout the program are designed to be carried out in cross-border collaboration using a common language and a mixture of shared and varied cultural references. The following is a list of aspects that need to be taken into consideration in order to accommodate a different cultural/linguistic group.

- **The Alphabet.** Instructions and other input from the project designers are bilingual (Armenian and English) but students interact and submit work exclusively in

Armenian. This is based on the use of an Armenian computer font. Producing a version of the program for another culture would simply require the use of a corresponding font.

- **Using Schools in the Diaspora.** The main points of contact with Diaspora Armenian students and teachers in the program are Diaspora Armenian schools. 3PN is currently exploring complementing that with active participation by individuals from their homes or community centers in the Diaspora, as well as the participation of non-Armenian (public) schools. If the program were applied to a different culture in Diaspora that does not have a network of schools, then the possibility of participating from home or from community centers would have to be expanded.
- **Homeland-Diaspora vs. Inter-Diaspora Structure.** 3PN is structured as a network of participating schools, where schools in Armenia are treated the same as schools in other parts of the world. However, half of the participating schools are in Armenia and collaborative teams are always formed with at least one school from Armenia acting as an informal catalyst to collaboration. For Diaspora cultures without a contemporary homeland (such as the Roma, for example) there would be a more uniform inter-Diaspora network. This is perfectly compatible with the structure of the project, but may present a somewhat different challenge for organizers.

The projects, exercises and games that are part of 3PN are specially designed for the Diaspora context. In the “Identity Game,” for example, students from the same ethnic background but living in different cities try to guess each other’s home towns based on clues about their everyday lives. “Moving People” is an activity based on population movements through migration under different circumstances, something that is, by definition, an integral part of the Diaspora experience. In addition, the program can be used as a resource for the introduction of a Diaspora culture to students who are outside of that culture.

Another aspect of 3PN that is well suited to the Diaspora structure is its flexible set of connectivity solutions. These can accommodate both low- and high-tech contexts, offering a very similar experience in both. Most Diaspora cultures need this flexibility due to the variety of locations they occupy. The following is a description of the different connectivity solutions used in the project.

- **Direct Access.** Locations that have adequate computer facilities and an adequate connection to the Internet can access the project website at least once a week, during program sessions.
- **Connectivity Centers.** For locations that do not have adequate facilities or viable Internet connectivity options, participants or project coordinators can arrange to use an external facility, such as an Internet café or community learning center.
- **Portable Web.** For remote areas where the local telecommunications infrastructure is inadequate, the latest version of the project website, including the latest work-in-progress by other participants worldwide, is physically delivered to a school or computer lab once a week on a high-capacity storage medium such as a CD-ROM. Participants access the site locally, and their work is then picked up on a magnetic storage medium, transported back to a central location and uploaded to the project website.

As infrastructure conditions improve or degrade, participants can move from one connectivity solution to the other with minimal additional cost and practically no retraining.

Conclusion

Because the Three Pomegranate Network website is well designed, both in clarity, content and pedagogy, teachers and students are able to engage successfully in collaborative, educational and culturally rich learning activities with a minimum of training and support. The cost of training teachers is substantially diminished. Moreover, the 3PN project serves as a model that other cultures in Diaspora could use to connect dispersed members of their society, while pursuing the development of pedagogically sound educational and technical skills. A significant requirement, though, would be to have highly committed project managers to shepherd the project through its various stages, including Web and learning-activity design, identifying willing participants from a worldwide audience, and helping to overcome many logistical issues associated with adding content to a school curriculum and identifying resources for connecting to the Internet.