

Student Support Technician Clubs (SSTCs) are extra-curricular groups of (primarily) 7<sup>th</sup> and 8<sup>th</sup> grade students who perform maintenance of their schools' hardware infrastructure, undertake basic network management, and assist teachers in their day-to-day computer use. As of the 2008-2009 school year, each primary school in the country has one SSTC, which operates under the guidance of two teacher supervisors. These clubs generally meet once per week after school, and give students the opportunity to build technical and problem-solving skills.

The presence of these clubs, with a cadre of students throughout the school ready to assist, has also encouraged teachers of all disciplines to incorporate technology into their lessons, by providing hands-on technical support when teachers need it. The role that student technicians have played in assisting teachers who are unfamiliar with technology has been especially vital. In a survey of 107 schools with active SSTCs, an impressive 61 percent reported significant improvements and 30 percent reported moderate improvements in the usability and accessibility of ICTs after only one year of having student support technicians.<sup>1</sup>

The important role that these clubs will play stands to increase in the future, given the expansion of technology into the schools through the government's "One Computer per Child" initiative. By capitalizing upon the students' interest in technology and eagerness to be of assistance and put their skills into action, SSTCs can provide cost-effective, sustainable technological and maintenance support from within each school.

Thus, these clubs play a valuable role by encouraging technology use schoolwide, providing cost-effective technology maintenance, and allowing those students who are interested in technology to have the opportunity for hands-on practice and experience in using computers and developing their technological skills.

In some schools, however, an even greater potential for these clubs has been recognized, and they have expanded their clubs' activities and offerings above and beyond the already enumerated benefits and services. Accordingly, creative and inspired ideas have emerged to put to good use of the students' interests and energies.

This spring, on a research trip to Macedonia, I visited with SSTC clubs in two schools: Petre Pop Arsov school in Bogomila and 11 October school in Skopje, where innovative activities in the clubs have been taken to the next level. The following summarizes my findings from these visits.

In both schools the students provide a valuable service—that of assisting teachers with technology issues, when they are in need of assistance. This provides the opportunity for students to be helpful while showcasing their computer skills. In fact, in both schools, when asked why they participate in the SSTC program, the students' responses were evenly divided between "I like computers" and "I like to be helpful in school." Other reasons that the students volunteered for their involvement in the SSTC included: they want to go into an IT profession in their future, and this seemed a good way to get

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<sup>1</sup> MK Connects: Macedonia Links Education and Connectivity, p. 18

practice, while students from both schools believed it was a good way to get into a more competitive high school—in other words: resume enhancing.

Both of these schools have found that student interest level has increased from that of the club's first year, and that it's not just 7<sup>th</sup> and 8<sup>th</sup> graders who are interested in participating, so they've expand their clubs to include other grades (5<sup>th</sup> & 6<sup>th</sup> graders in Skopje and 6<sup>th</sup> Graders in Bogomila). This not only provides a larger cadre of students to draw from when teachers need assistance, it promotes continuity over multiple school years, and develops student leadership opportunities as experienced students can assist in instructing new club members, and can play leadership roles in carrying out SSTC-related projects.

In some cases, the teachers identified the students they thought would be good candidates for participating in the SSTC program, and in other cases, the students were self-identified. In Bogomila, a competitive exam was held, because there were simply too many students interested in joining the club. This not only increases the prestige of being in the club, it increases the level of commitment on the part of students once they are members. Knowing that there is this level of interest on the part of the students also seems to increase the level of inspiration for the teachers involved. These students really want to be there, and to be active participants. In some cases, students had to wait two hours after their school day had ended until the SSTC club met each week, which demonstrates a very high level of interest and commitment on the part of these students.

Some of the activities that these SSTC clubs do are exactly in line with what they were originally intended for, and include:

- Checking whether the computer lab computers have any problems, fixing them if they do.
- Removing viruses from the computers.
- Installing (or re-installing) software on computers.
- Deleting any unnecessary documents or programs if there is a lack of space on the computers.
- Helping teachers with trouble-shooting or when they request computer-related assistance.
- Addressing any Internet connectivity issues.

SSTCs allow for a great deal of skills development in the students who are involved with them, with a bit of creativity on the part of the teachers involved. Given the levels of both creativity and enthusiasm on the part of both the students and teachers in these particular schools, they went above and beyond the original intentions of the SSTC club to perform maintenance services. The following are some examples:

- Students have assisted with input on curriculum. The teacher came up with an idea, but let students give their ideas (and time) to helping develop the project, which made the assignment ultimately more creative and aesthetically presented in the end.

- Students have prepared school-wide presentations for various events taking place at the local, national, or even international level. They have also participated in competitions at the regional and national level, presenting the work they have created in the context of or with the skills they learned in the SSTC club. By presenting their work to various audiences, students develop their presentation skills and ultimately, increase their level of self-confidence.
- Both of the schools have produced instructional videos that are now being used in classrooms in their school districts—and some, even to a wider extent!
- The club in Bogomila already creates a yearly almanac for the school, and in the coming school year, will also be creating a yearbook for the school, while making use of the technology and computer equipment.
- In Bogomila, the SSTC group showcased their skills in the context of a community food fair. The students made a very professional-looking digital presentation on the villages in the region, involving even more students as they asked their peers to collect information and photos from each village in their region. Additionally, they made flyers to advertise this fair, and also, from their own initiative, made visit cards to sell to local businesses. These cards proved to be quite popular among the businesspeople, many of whom had graduated from these schools and wanted to demonstrate their local pride. The students used the proceeds from selling these visit cards to buy sports equipment for their schools. The success of this endeavor has inspired the school director and the SSTC information technology teacher to pursue a public-private partnership with local businesses for the SSTC students to create websites for these businesses, as well as to ensure an even greater level of participation and success at next year's food fair. In the future, they hope to raise enough funds to buy additional technology equipment.

In the future, these clubs hope to be able to collaborate at a greater level with fellow SSTC clubs both on a regional level and across the country. Not only do they anticipate that this will spur greater creativity in what can be done by and with the SSTC groups, but it may promote competition among the groups, as competitions are being announced by PEP, in order to promote teamwork and presentation skills among SSTC group members.