American Institutes for Research

Academy for Educational Development

Aga Khan Foundation

CARE

Discovery Channel Global Education Fund

Education Development Center

Howard University

International Reading Association

The Joseph P. Kennedy, Jr. Foundation

Juárez and Associates, Inc.

Michigan State University

Sesame Workshop

Save the Children Federation, USA

University of Pittsburgh

World Education



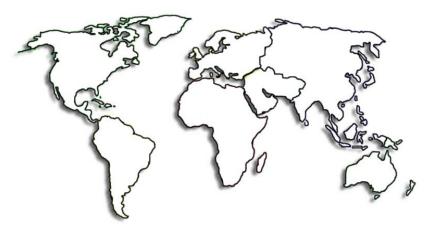




Educational Quality Improvement Program Classrooms • Schools • Communities

Secondary Education Activity

Final Report September 5, 2003 – September 4, 2008



Submitted by: American Institute for Research

With: International Reading Association

Associate Cooperative Agreement No. 165-00-03-00105-00 U.S. Agency for International Development Cooperative Agreement No. GDG-A-00-03-00006-00

INTRODUCTION	3
I. TEACHER DEVELOPMENT COMPONENT	5
A. COMPONENT DESIGN AND STRUCTURE	5
B. COMPONENT ACTIVITIES AND ACCOMPLISHMENTS	6
C. TOWARDS SUSTAINABILITY	
D. CHALLENGES, LESSONS LEARNED AND RECOMMENDATIONS	
II. CAREER DEVELOPMENT COMPONENT	15
A. COMPONENT DESIGN AND STRUCTURE	
B. COMPONENT ACTIVITIES AND ACCOMPLISHMENTS	
C. TOWARDS SUSTAINABILITY	
D. CHALLENGES, LESSONS LEARNED AND RECOMMENDATIONS	21
III. SCHOOL MANAGEMENT COMPONENT	23
A. COMPONENT DESIGN AND STRUCTURE	23
B. COMPONENT ACTIVITIES AND ACCOMPLISHMENTS	
C. TOWARDS SUSTAINABILITY	
D. CHALLENGES, LESSONS LEARNED AND RECOMMENDATIONS	
IV. RESEARCH, MONITORING & EVALUATION	
A. PURPOSE AND OVERVIEW OF THE STUDY	
B. INDICES DEMONSTRATING PROGRAM IMPACT	29
C. OVERALL RESULTS	
D. DISCUSSION	
E. CONCLUSIONS AND RECOMMENDATIONS	

TABLE OF CONTENTS

Introduction

Following independence in 1991, the Republic of Macedonia passed through a difficult period of transition and reform in a variety of spheres in order to prepare for entrance into the European Union. In the sphere of education, Macedonia's participation in international assessment tests such as Trends in International Mathematics and Science Study (TIMSS), Program for International Student Assessment (PISA), and Progress in International Reading Literacy Study (PIRLS) showed Macedonian students scoring significantly below the international average. Government leaders, keen to prepare their workforce to compete globally, undertook a series of reforms in order to improve educational quality and increase economic competitiveness of their citizens. In support of this goal, United States Agency for International Development (USAID) funded the Secondary Education Activity (SEA).

On 5 September 2003, the American Institutes for Research (AIR), in cooperation with the International Reading Association (IRA), was awarded a cooperative agreement to implement the SEA in Macedonia. This five-year project aimed to improve the quality and relevance of secondary education for Macedonian youths, to equip them with the skills and knowledge to succeed in a changing social and economic environment, and to provide the Macedonian economy with a more flexible, better-prepared workforce. The SEA Project, fully funded by the USAID in collaboration with the Ministry of Education and Science (MOES), focused first on USAID Strategic Objective 3.4: Mitigate adverse social impact of the transition to market-based democracies which was later changed to *Strategic Objective 3.4: Macedonian Youth are better prepared for employment through education programs*. The project incorporated several strategies for achieving this result, including:

- Improving vocational instruction through the training of teachers,
- Improving school environments by helping make school directors more effective managers and agents of change,
- Supporting school boards in their new responsibilities and roles given them under decentralization, and
- Providing students with opportunities to practice and develop important business and leadership skills and providing the information needed to make smart choices about their careers.

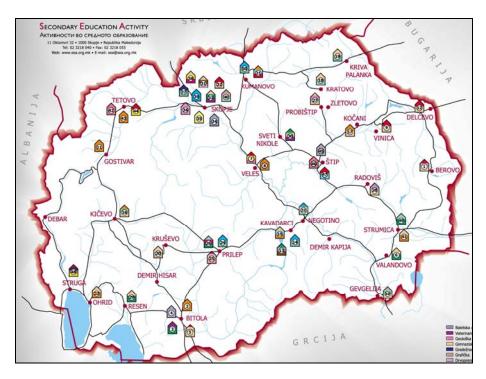
To implement these strategies, SEA worked through four components:

- 1. <u>Teacher Development Component</u> aims to support teacher professional development, enhance the knowledge and skills of teachers for quality teaching and improve students' achievements.
- 2. <u>Career Development Component</u>'s goal is to help better prepare secondary vocational students for employment through improving the practical, business-related experiences open to students.
- 3. <u>School Management Component</u> (Director certification and school board support) works to improve professional competencies of school directors through initiation of

Certification Program and continuous professional development as well as provide knowledge on School Board roles according to current legislation and develop capacity of school members to fulfill their duties and roles.

4. <u>Research, Monitoring and Evaluation Component</u> plays a critical role throughout the life of a project. It provides essential information and feedback for effective and responsive project management - developing and revising indicators and instruments for data collecting; and providing data storage, analysis and reporting.

SEA implemented component activities to prepare youth for employment in 50 secondary vocational education schools with many activities expanding beyond the 50 target schools to other vocational, primary, and secondary schools throughout Macedonia. Below is a map of SEA's original, 50 target schools.



The SEA final report is organized according to its four project components. For each of the three technical components (i.e., Teacher Development, Career Development, School Management), the report will cover the component's background and structure; its activities and achievements; its strategies towards sustainability; and lessons learned, best practices and recommendations. The section summarizing the Research, Monitoring and Evaluation component will be more holistic and note summative findings.

I. Teacher Development Component

A. Component design and structure

In line with the USAID's Strategic Objective 3.4.1, the goal of the Teacher Development Component (TDC) was to increase the number of teachers using interactive strategies in order to improve the quality and relevance of instruction, with the ultimate goal of increasing the number of youths being better prepared for employment.

Reforming classroom practices faced many

Component Activities

Teacher training for interactive methodology Mentoring for continuous improvement Teacher training for student assessment National policy for professional development

challenges in Macedonia. Many teachers were of an older generation and, although committed, were set in their teaching methodologies and practices. In addition, there was not wide-spread knowledge or expertise of how to apply new teaching methodologies. Without knowledge or support systems, teachers had little incentive to adopt new, interactive practices. Further exacerbating the situation, there was a noted gap between what was taught in pre-service training at the universities and what skills teachers needed in order to run an effective classroom. These issues, coupled with an outdated vocational curriculum, resulted in students graduating with skills that were no longer relevant to the new economic realities.

SEA's original task was to train all teachers in all SEA's target VET schools. For the first year, SEA proposed to train four teachers from 15 participating schools. In the second year, train the directors and four teachers in each of the remaining 25 VET schools. The proposed training program for teachers addressed specific needs such as self-evaluation, peer evaluation, development of objective tests, to cover all teachers over the five-year period. At the end of each of the first two rounds of professional development activities, SEA proposed that participating secondary schools nominate participants (teachers and administrators) to serve on a committee to identify teacher-led action-research inquiries. SERA was also tasked with organize training, mentors, and resources to facilitate this school-based action research.

As originally envisioned, teacher development and school director development were to be integrated under one component led by a coordinator. Due to the intensity of activities that would be needed to support both teacher and school directors, the professional development activities were split into two components: the Teacher Development (TDC) and School Director Certification. International Reading Association (IRA) as an EQUIP1 partner was responsible for overseeing the technical implementation of this component. Drawing upon their expertise in teaching methodologies as well as on a pool of renowned IRA volunteers, IRA formed training teams composed of Macedonian educators and international consultants.

Upon the start of implementation, members of this component set out to support teachers' professional growth as one of the key factors for school improvement. The component

focused on interactive teaching, mentoring, and assessment to make students' classroom experiences more relevant to their futures as democratic citizens and productive members of the workforce. The TDC included the following three elements:

- 1. Teacher training for interactive methodology. Teacher training for interactive methodology involved creating and developing the topics and contents of instructional modules for teacher training as well as preparing and helping implement a model for disseminating the training in the project's schools.
- 2. Mentoring for continuous improvement. Mentoring for continuous improvement involved building a school-based training system and empowering schools' faculties as autonomous learning communities. This element also involved developing a mentoring program to engage teachers and teacher leaders in the continuous improvement of their teaching practice as well as establishing a monitoring and evaluation system for teacher professional development.
- 3. Teacher training for student assessment. Teacher training for student assessment involved creating and developing the topics and contents of instructional modules for training teachers in the development and use of formative assessments. This element used the training-of-trainers dissemination model developed during the earlier training for interactive methodology.

B. Component activities and accomplishments

Training teachers in the use of interactive instructional methodology consisted of five primary steps: production of instructional modules, training-of-trainer workshops conducted off school sites, facilitation skills training, teacher-training workshops conducted at school sites, and certification. Five IRA volunteer consultants¹ partnered with six Macedonian educators² to produce instructional modules. To further buttress this activity, the SEA/TDC mentoring program was established to develop teacher trainers' capacities to provide essential leadership in the school's instructional program by refining their abilities to assist teachers in promoting active learning in their specific disciplines. The mentoring program promoted a school culture of collaborative practice and positive collegiality and built the capacity of school staff to function as a professional learning community by providing school-based continuous improvement of the quality of instruction and professional development support.

After teachers were trained in interactive teaching methodologies and started applying the methods in their classes, their evaluations suggested that they lacked appropriate ways to assess students. The TDC recognized the importance of incorporating student assessment as an integral part of the learning process and to provide the teachers with skills for the use of various classroom assessment methods to determine student knowledge, skills, and competencies, as well as to assess student growth in these areas over time. Training for

¹ William Brozo, Jill Lewis, David Moore, Gary Moorman, and Betty Sturtevant

² Elena Ackovska-Leskovska, Branko Aleksovski, Sonja Gosevska-Ivanovic, Vesna Janevski, Snezana Jankulovska, Lirie Rexhepi, and Florina Shehu

student assessment was not included in the in SEA original plan. The Human & Institutional Development Program, implemented by World Learning, funded this training. A primary objective of this was to train teachers in developing and using formative assessment as one way of improving achievement and equity of student learning outcomes and developing students' learning-to-learn skills.

On the policy level, the SEA/TDC staff collaborated with members of the Ministry of Education and Science to form a task force and create a national document for standards for professional development. The task force started work in July 2007 and continued through July 2008. Members of the task force included representatives from the MOES, Bureau for Development of Education (BDE), Vocational and Educational Training Center (VET Center), Trade Union for Education/Science/Culture, and universities and schools. The goal of the task force was to design standards for teacher professional development that would guide the planning, implementation, and evaluation.

	Participants	Cohort 1: 15 schools	Cohort 2: 35 schools	Total
Training-of-	School Directors	15	35	50
trainer	Teacher Trainers	60	133	193
workshops	Pedagogues	15	35	50
conducted off	Regional consultants			
school sites	and BDE Advisors	16	15	31
	Total	106	218	324
Teacher-training	Teachers	731	2161	2892
workshops	Advisors from BDE		24	24
conducted at	Inspectors		45	45
school sites	Total			2961
TOTAL		837	2491	3285

Table 1. Number of participants of SEA's Teacher Professional Development

SEA has met all of its targets under the TDC. By project's end, SEA/TDC trained 2,892 teachers in the four instructional modules. Fifteen of the 2,892 total teachers were identified as SEA Master Trainers; 193 of the 2,892 total teachers become certified as SEA Teacher Trainers; and 854 of the 2,892 total teachers (30%) became certified as SEA Teachers. In order to ensure sustainability, SEA actively engaged staff of the MOES' BDE. Thirty-one BDE advisors and Regional consultants participated on the training of trainers (TOT) workshops and 45 inspectors from the State Educational Inspectorate (SEI) and 24 advisors from the BDE were trained in the four instructional modules in a specially organized workshops for BDE advisors and SEI Inspectors. SEA's original targets were as follows:

- FOSIM:
 - \circ 2004 = 11 gymnasia (60 teachers per school) = 660 teachers; Target = 100% teachers from the selected schools.
 - 2005 = 7 additional gymnasia (60 teachers per school) = 420 teachers; Target = 100% teachers from the selected schools.
- AIR: Target: 40 VET schools in 5 years
 - \circ (8 schools x 25 teachers = 200 teachers per year)

- dot.EDU: Target: 40 VET schools in two years
 - 2004 = 1 computer teacher x 40 VETs = 40 teachers (100% from the selected schools).
 - \circ 2005 = 5 extra teachers per school x 40 VETs = 200 teachers (100% from the selected schools)

Below is a list of major milestones and achievements for each of TDC's major activities. This list provides a brief description of how SEA/TDC implemented activities to achieve project targets and goals.

Teacher Training for Interactive Methodologies

- Teacher training modules and demonstration activities (May 2004 and February 2005): SEA completed four modules were focused on the following seven themes which were considered essential for students' development as productive members of the workforce and democratic citizens: collaboration, communication, critical-thinking, leadership, problem-solving and decision making, research, and self-assessment. The instructional modules and their corresponding demonstration activities then were presented to school teams of Macedonian consisting of the school director (i.e., principal) and pedagogue (i.e., psychologist) as well as four teachers the director and pedagogue selected according to SEA/TDC criteria.
- Facilitations skills training (December 2005): SEA provided training to assist teacher trainers with their new roles and responsibilities. This training was financed by the USAID Participant Training Program (PTP) through World Learning. It was presented by Violeta Petroska-Beska, university professor. The topics and the methods included principles and methodologies of teaching adults; experiential learning in a workshop; characteristics of facilitation; communication skills; setting the climate for facilitation; dealing with difficult situations; presentation skills; and planning a workshop. This facilitation skills workshop included facilitation practice.
- Teacher-training workshops conducted at school sites: Sixteen Regional Consultants, advisors from the MOES Bureau for Development of Education (BDE), worked with three-to-four teacher trainer teams to plan and implement dissemination workshops at the schools. The recently taught teams of teacher trainers then conducted dissemination workshops at each of their schools to present all the workshop modules to their colleagues. The teacher trainers explained and modeled the instructional strategies, and they observed the teachers using the strategies in their own classrooms.
- SEA/TDC Teacher-Trainer Certification: The teacher trainers later submitted portfolios that were assessed according to specific criteria in order to be certified as SEA/TDC Teacher Trainers. Portfolios were an important source of information for the Certification, and they also served as powerful personal learning tools. The teacher certification portfolios contained evidence of successful completion of the four SEA/TDC workshops; reports of lessons observed by the Regional Consultants, directors, and psychologists; a reflective essay; examples of lesson plans that followed the format for lesson planning discussed during the workshop; and student products.
- SEA Teacher Certification: The teachers in all project schools who completed the workshop delivered by certified SEA/TDC Teacher Trainers and who demonstrated

consistent and successful classroom applications had the opportunity to earn SEA Teacher Certification. SEA/TDC Teacher Trainers, directors, and pedagogues assessed the teachers' portfolios according to specific criteria. The teacher certification portfolios contained the evidence of successful completion of the four SEA/TDC workshops; reports of lessons observed by SEA/TDC Teacher Trainers the, directors, and psychologists; a reflective essay; examples of lesson plans that followed the format for lesson planning discussed during the workshop; and student products.

Mentoring for continuous improvement

- Mentoring manual for continuous assessment: SEA sponsored to IRA volunteers to develop the "Teacher Mentoring Manual". The manual provides concrete examples and directions for mentors to assist teachers in effectively implementing the instructional strategies presented in the four SEA/TDC modules.
- Mentoring workshops: The same IRA volunteers held mentoring workshops at several off-school sites in Macedonia. The two-day workshops provided detailed information on informed classroom observations, conferencing skills, reflective questioning techniques, and effective oral/written feedback to teachers. The consultants introduced each technique, then discussed and modeled it to ensure understanding of its place in mentoring and its appropriate use. Certification follow-up was conducted to refine mentors' skills and assess the mentors' professional development interactions at their school sites.
- Mentor Qualification Workshop: SEA held one day workshops implemented by IRA consultants with advisors and 200 teacher trainers from the 50 project schools. Prior to the workshop, the teacher trainers prepared a lesson plan to demonstrate to their colleagues one example of their qualifications of being a mentor. They each also conducted a study group based on a lesson they wanted to improve. In addition, the mentors were required to produce an analysis and reflection on the current progress of the teaching practice in their schools. Each mentor received evaluation feedback from the consultant and their colleagues regarding their practice.

Teacher Training for Student Assessment

- Production of assessment module: SEA/TDC added the module *Improvement of School-Based Assessment* authored by IRA volunteer consultants Gerry Shiel and Karl Kitching. This training module included topics such as asking questions to assess learning, responding with appropriate feedback, and evaluating a variety of summative assessments using teacher-generated rubrics. The assessment manual offers assessment methods that involve writing and essays, projects, and portfolios.
- Assessment workshops: The assessment workshops included the following topics: Importance to assess students' incoming knowledge, and to identify appropriate teaching objectives and student learning outcomes; Strategies for estimating students' prior knowledge, including Semantic Mapping and Semantic Feature Analysis; Giving feedback to students, both oral and written, as a key factor in motivating students to learn, and developing their self-esteem; Different levels of cognitive functioning, including literal, inferential and evaluative learning, and how such learning can be developed through questioning; Hands-on practice in developing and

applying scoring rubrics in assessing oral presentations, writing (in a range of genres), and project work; Encouraging students to have some involvement in establishing goals, to reflect on the feedback they receive, to monitor their learning and to evaluate their own work; and Use of multiple-choice style tests to monitor students' progress. The teacher training for assessment was realized in three phases, using the overarching training-of-trainers model used during the earlier teacher training for interactive methodology.

- Phase I: Assessment Workshops SEA trainers trained by IRA Consultants (January 2007): During the first phase, which took place from January 10-13 2007, 20 SEA teacher trainers, 8 BDE Advisors and 3 Inspectors from SEI (State Education Inspectorate) were trained.. During the second semester of the 2006/2007 school year, SEA trainers applied the formative assessment methods in their classes, filled in reflection questionnaires, and submitted samples of student products that they delivered to the SEA office. This qualified them to be trainers for the second phase.
- Phase II: 180 teacher trainers and 50 pedagogues/psychologists trained by 18 SEA trainers (September 2007): During the second phase 18 SEA trainers trained 180 teachers (who would later train the other 2500 teachers during the third phase), 25 psychologists/pedagogues, and 18 advisors from the Bureau for Development of Education.
- 3. Phase III: 2500 teachers trained by 180 teacher trainers (January and March 2008): In order to qualify for trainers at school level in the third phase of the assessment program, 180 trained teachers during the first semester of the year 2007/2008 applied the assessment methods in their classes, filled in reflection questionnaire, prepared detailed training plans, delivered confirmation from the principal, and turned in samples from their students' work. Along with this, they attended preparatory sessions that were led by SEA trainers.

National Policy for Teacher Professional Development

- Analysis and research of the current situation: The task force prepared the document *Analysis of the Existing System for Teacher Professional Development and Effects of the System.* The goals of the analysis were: to identify the current laws and bylaws regulations regarding teacher professional development; to determine the ways in which the current regulations functions; to discover the reasons that impended functioning of the regulations (absence of model/system for development of the teaching staff through their professional career); and to determine the capacities of the system institution and defining their roles and responsibilities. The group also worked on *Analysis of Systems and Models of Effective Professional Development in Other Countries.*
- Plan for teacher professional development: The task force developed the a draft version of the principles and standards for professional development and standards for teachers' competencies as well as a draft version of the manual for professional development for school needs.

• Incorporate a fully developed professional development plan into all levels of the educational system: The task force started the process of incorporating the standards into the legal system.

C. Towards sustainability

From June 30 through July 4, 2008, three IRA volunteers with SEA staff met with individuals and groups to assess the affects of TDC's activities and identify recommendations for sustaining success. Below are their recommendations organized by Education System, MOES, BDE and National Policy.

Educational System

- Take full account of the productive practices and experiences of the TDC activities in order to further develop the national education and training system. Continue empowering schools for school-based training for effective teaching practice.
- Ensure communication and coherence throughout the educational system including the MOES, BDE, VET, Inspectorate, Labor Unions, Directors, Teachers, Universities, Parents, Community Members, and educational donors.
- Train both pre-service and in-service teachers in creating learning opportunities that develop students' foundational skills and key competencies essential for success in the workplace as defined by the European Union:
 - Learning to learn (critical thinking skills) include problem solving, experimenting, making decisions, evaluating, assimilating new knowledge and applying new knowledge and skills in a variety of context – at home, at work, family, in education.
 - Interpersonal skills relate to teamwork and communicate effectively with people in social and work situation.
- Create a coalition of agencies (ex. USAID, BDE, NGOs) to study the effectiveness of instructional methodologies
- Continue to develop formative and summative assessments that align with interactive instructional methodology
- Establish action programs to modernize the national education and training system to focus on the following:
 - Require staff development for teachers
 - Provide continuous professional development for teachers and trainers that focus on various forms of professional development (case studies, action research, study groups, and professional networks) and not only workshops, courses, seminars.
 - Improve partnerships between education institutions and schools

- Enable schools to become autonomous learning communities for their teachers that support lifelong learning
- Provide adequate mentoring support throughout teachers' careers

MOES

Secondary Education Sector

- Create policy and influence laws/bylaws with regard to professional development and interactive teaching. Adopt professional development standards as standards for teacher competencies at different levels of expertise
- Provide resources and compensation for professional development efforts
- Support working conditions that can lead to opportunities for interactive learning
- Increase the Inspectorate's role to support schools' ongoing self-evaluations

Bureau of Education/Vocational and Educational Training Center

- Extend to other schools SEA's professional development in interactive teaching methodology
- Generate instructional resources, such as instructional guides and videos of effective practices, computers and diverse reading materials that support interactive teaching
- Partner with the SEA trainers for professional development
- Develop informal assessments that inform teachers' and students' decisions during interactive instruction
- Partner with school directors to help them integrate professional development into schools' action plans.
- Collaborate with school mentors to support new teachers
- Promote directors' abilities to be instructional leaders
- Provide school personnel with constructive, formative assessment and feedback for interactive learning and teacher professional development
- Assume the leadership role in the development of a Macedonian Vocational Education Association

State Education Inspectorate

- Align assessments with the interactive learning strategies
- Monitor teachers in a way that provides supportive evaluations and specific positive feedback designed to promote the improvement of instruction over time.
- Support schools' ongoing self-evaluations

Policy Recommendations

The following recommendations are for the successful incorporation of the standards of teacher professional development into the educational system:

- Designing a plan for implementation of the standards for high quality professional development on school level
- Designing a plan for implementation of a reward and certification system for career development of teachers
- Building a system and continuous monitoring and evaluation of the professional development activities.
- Continuous monitoring of the implementation of the professional development
 - Identifying barriers for the implementation of the standards at the state, local and school level and developing strategies how to overcome the barriers

D. Challenges, lessons learned and recommendations

Substantial numbers of teachers have participated actively in SEA/TDC. Through their participation, SEA started to build a school based training system and empower schools as learning communities for their teachers. Through focus groups and questionnaires, SEA has found that TDC activities have contributed to changing many teachers' beliefs about the value of interactive instruction. SEA recommends continuing with school based training as it allows teachers to improve their pedagogical skills on a continuous basis without taking time away from classes or expend money on travel costs or rented facilities.

The SEA/TDC has established a good foundation of interactive instructional methodology in the schools. Multiple indicators provide evidence of changes in teachers' uses of interactive teaching methodologies; this approach to teaching is becoming part of the culture of many schools. Critical thinking and problem solving are commonly identified as promising learning outcomes of the interactive methodology. However, teachers report that most students still are not successful with these processes. Changes in teaching practice take time to become embedded in ongoing practice. Teachers need continuous professional development (training, mentoring, and advice) in order to have quality teaching in their classrooms that translates into high levels of student achievement.

TDC's mentoring program has achieved success and a positive image as a new form of professional development in Macedonia with a high level of impact on: professional knowledge and skills (teaching and mentoring); teaching practice; and student achievement. The mentoring program seems to have enriched the interactive teaching knowledge and skills of the mentors more than the teachers supported by the mentors. Yet, the process of incorporating mentors into the education system is very slow, and the schools are faced with problems related to the mentors' status and recognition.

Regarding the effects of Assessment Training, during the regular reflection meetings and school reports teacher trainers reported that assessment' topics were positive accepted by teachers. Teachers acquired new knowledge and skills of the key concepts and strategies

of performance assessment and they began to change their own assessment practices as a result of attending the workshops. Teachers understand the importance of formative assessment as a central element in the overall quality of teaching and learning. Teachers involve students more in assessing their own learning (self-assessment) and encourage them to reflect more on their own learning process. Teachers started to meet with other teachers to plan assessment activities and to achieve consistency in grading students work (essays, project work). During the July 2-4, 2008 close-out interviews, key informants' comments converged about the idea that the schools benefited from their first-ever uses of formative assessment of students. For instance, several school directors pointed out that teachers were integrating rubrics with their instruction, which gave students regular feedback and diminished assessments based only on teachers' subjective opinions.

In general, the assessment training achieved progress in helping teachers implement formative assessment as an integrative part of their teaching process. Teachers' awareness is especially increased regarding the role of formative assessment in providing feedback on students' performance to improve and accelerate learning. Although teachers are motivated to use formative classroom assessments, at the same time there are some problems with the way formative assessments are used:

- Teachers still have a tendency to assess quantity of work and presentation rather than quality of learning.
- Teachers have greater attention to marking and grading knowledge of students rather than providing appropriate feedback for improvement and to help them learn more effectively.

Additional workshops and meetings to discus deeper assessment methods is needed for the teachers in order to utilize assessment in an effective manner, keeping in mind the purposes of and principles behind it. The focus should be on the following: effective feedback to students; active involvement of students in their learning; adjusting teaching to take into account the results of assessment; recognition of the profound influence assessment has on the motivation and self esteem of students; and the need for students to be able to assess themselves and understand how to improve.

II. Career Development Component

A. Component design and structure

A central focus of the Secondary Education Activity project was to identify those activities and interventions that could provide students with skills, knowledge and abilities required by Macedonian industry. Working in 50 vocational schools, SEA

Component Activities

Career Centers

School companies

Vocational Student Organizations

helped schools increase and improve practical, business-related experiences open to students. The project forged closer links between schools and businesses by forming a Career and Technical Student Organization (CTSO) called MASSUM. SEA, in partnership with MASSUM and the MOES held three national "Educational Rendezvous" events. The multi-day event gives schools the opportunity to present themselves to public, especially 8th graders looking for a high school to attend the following year. Vocational students compete for top honors in leadership and business related contests.

The Supervised Occupational Experience or "Real Firms" program has evolved during the project. Schools elected to form one of two forms of school companies that would give both teachers and students the opportunity to experience the world of business first hand. The first was virtual firms. Most applicable to the business curriculum, these are imaginary companies run by students in a virtual world where they can develop and trade products. They can trade with other firms and a central service center run by the Ministry performs the function of various agencies such as banks, customs and taxes.

B. Component activities and accomplishments

The Career Development Component focused on three core activities:

- Career centers
- Real and Virtual school companies
- Vocational Students Organization (MASSUM)

Career centers

The activities related to the establishment of the Career Development Centers addressed:

- Establishing a career center in 71 schools;
- SEA in collaboration with local consultants provided trainings on:
 - Job searching techniques;
 - CV preparation;
 - Cover letter preparation;
 - Job interview;
 - Career planning process;
 - Public Speaking;
 - Effective communication.

- Instructional guides and manuals were developed by local consultants and available for all potential CC users
- Career Centers were equipped with all available printed and audio/video materials necessary for research and students' career development.
- Teachers incorporated various parts of materials as supplements to existing curriculum, thus avoiding major revision of the curricula.
- Strengthening the links between the schools, the companies and other social partners. The purpose of this was to provide students with better information on the labor market, and where they can obtain relevant information and assistance directed towards improved career development.
- Career Centers provided information for students for further education information about the faculties, theirs programs, scholarships etc.

Topic of the training	No. of participants	Days	Total training days (groups X days)
Job searching, CV and job interview	224	3	33
PoA of CC, self- employment	213	2	16
Career planning	65	2	8
Public Speaking	110	2	10
Effective Communications	120	2	12
Total Num. of participants:	732	Total training days:	67

Table 2. Information about CC trainings

<u>School companies</u>

a. Real companies

The Career Development Component has helped 44 schools set up real school companies by providing \$15,000 in start-up capital, business plan training and record keeping systems. To qualify for a school company, the school team had to develop a business plan that included a budget and cash flow statement to indicate its potential profitability. In most cases, schools were able to attract additional funding from the MOES, other donors, and the community. Working in a real company, students would gain real business experience while in school. A Manual about Business Plan Development was developed and delivered to all schools. An additional 15 vocational schools are in the process of opening real companies at the beginning of the 2008 school year.

The Career Development Component initiated a new activity called *Supervised Occupational Experience program – SOE*. The primary goal of the SOE program was to provide students with opportunity for work-based learning directly in industry. The SOE program consisted of planned activities designed to gain hands-on experience and develop skills in specific career areas. Within this activity, trainings were delivered to VET center advisors and vocational schools teachers. A manual for a SOE program was developed and delivered to all vocational schools.

b. Virtual firms

The activities linked to the virtual school companies were implemented in economic schools. The SEA project organized the trainings, which consisted of five modules for teachers and managers from these schools. The trainings were delivered by the director and teachers from the Economy and Business Center in Sofia, having 12 years of experience with virtual school companies. For implementation of the activities within the virtual school companies, the schools provided a suitable classroom while the SEA project provided the necessary equipment up to \$5000 per school. Beginning in 2007, virtual firms became a mandatory subject for economic schools.

Topic of the training	No. of participants	Days	Total training days (groups X days)
V. firms-module 1	22	3	3
V. firms-module 2	16	3	3
V. firms-module 3	17	3	3
V. firms-module 4	12	3	3
V. firms-module 5	11	3	3
V. firms-module 1	21	2	4
V. firms-module 2	21	2	4
V. firms-module 3	17	2	4
RF – Business plan	204	3	33
RF-Record keeping	270	1	16
SOE	95	4	4
Total Number of participants:	706	Total training days:	80

Table 3. Information about School Companies trainings

c. VSO-MASSUM

In order to strengthen the links between schools and businesses and to provide students with opportunity to develop leadership skills, the Career Development Component helped vocational schools form a Vocational Student Organization (VSO) called MASSUM. Approximately 70 schools have now started a local MASSUM chapter. The organizations were an outgrowth of two study tours to the USA in which teachers and students experienced VSO organizations in US high schools (e.g., FFA, Skills USA, HOSA, DECA) and the role students play in linking industry to vocational programs. On these study tours, the students also experienced the leadership skills developed by their American counterparts. MASSUM is the primary motivating force for students and gives them the possibility to practice leadership skills, to compete and be recognized. MASSUM has a leadership team consisting of seven students along with an executive board that is responsible for the implementation of annual program activity plan. The executive board consists of seven representatives from teachers-advisors, business representatives and MOES representatives responsible for organizational and operational activities. A teacher guidebook for VSO was developed and delivered to all MASSUM chapters.

In partnership with SEA, MASSUM held three national career fairs called "Educational Rendezvous" events. The Educational Rendezvous brought together over 70 schools, faculties and businesses for a 3-day event that linked vocational schools directly with industry. The *Educational Rendezvous* was an opportunity for schools, faculties, municipalities, the private sector and projects to come together and support education. The schools had chance to present themselves to the public, especially to 8th graders looking for a high school to attend the following year. Students from all vocational schools had an opportunity to participate on different competitions (e.g., marketing plans job interviews, public speaking, best school business, best web page, best video presentation). The private sector participated as judges for the competitions. In total, the three Educational Rendezvous attracted over 100,000 students, teachers, school directors and business leaders. Over 3,500 students were involved in individual and team competitions. MASSUM students along with their teachers and the SEA team, were involved in the organization of the activities for the Rendezvous. Based on effective deliberations with the Minister of Education, the MOES ensured that they would support and provide leadership for these events in the future.

Topic of the training	No. of participants	Days	Total training days (groups X days)
Students study tour in USA – VSO's in USA	12	5	5
Teachers study tour in USA – VSO's in USA	10	5	5
Establishing a VSO in Macedonia	34	5	5
DevelopmentoftextbookforMASSUM advisors	60	2	2
Leadership training for MASSUM leaders	21	3	9
Leadership training for teacher advisors and chapter presidents	95	3	6
Total Number of participants:	232	Total training days:	32

Table 4. Information about MASSUM trainings

C. Towards sustainability

Career Centers

Results from project monitoring show a continuous improvement of students' job searching and communication skills. This is a direct result of implementing career development activities in the classroom as a part of existing curricula for specific subjects (e.g., mother language and communication, business, vocational subjects). Teachers were provided with textbooks for all topics mentioned above, which made their work much easier. Project monitoring also revealed lower results in the provisions of labor market information to students. Two main reasons can be suggested: 1) there were not career counsellors in schools. Such counsellors could collect and provide Career Centers with current labor market information. Teachers could provide students with that information in their classes; 2) a lack of labor market information. Again, provided through the career centers, career counsellors could work through local employment offices and business associations to collect this information.

At least two teachers per school were trained from all 70 schools, so they could be a very competent core group for all other career center activities that MOES or some other donors will implemented in the future. One advisor from the VET center was appointed as a responsible person for all career center activities. This person would be the designee to continue coordinating and supporting teachers in the implementation of career development activities in the schools.

The following steps should be undertaken in the future to improve quality of career guidance services:

- Establishing of Career guidance system in Macedonia
- Appointment of Career counselors in schools
- Development of system for extensive training and certification of Career counselors
- Strengthening the links among the schools, the companies and other social partners which will enable better labour market information and assistance for students.

School companies

a. Real School Companies

For the first time in Macedonian vocational schools, teachers and students had an opportunity to become entrepreneurs and try to run their own business. Business teachers and instructors were trained to incorporate business planning and financial analysis into their regular course work with students. Because all schools are required to teach some business classes, the company would be an excellent example for this unit of instruction.

Additional help should be provided in the future by relevant institution, having in mind that the practicum instructors, who do not have a business background, manage most companies. In addition, business financial analysis curricula should be improved. Although modules and brief workshops were delivered on record keeping, few teachers had experience in this area. Records need to be examined more closely and financial analysis understood more completely by teachers and students. Also, not all school companies had an advisory board consisting of local business leaders. A board composed of the private sector would be extremely helpful in making good business decisions. School boards are very important body and they also need to be included more actively in planning of such school-based, entrepreneurial lessons.

The complete process of monitoring and supporting activities in real school companies should be done by the VET (Vocation Education and Training) center. This is the most relevant institution and should take into account of all recommendations mentioned above and provide sustainability of Real Company activities. One advisor was appointed by the VET center. It is recommended that such a role be continued so to coordinate and support teachers in implementation of real company activities.

b. Virtual Firms

As the Virtual Firms became a mandatory subject for economic schools, students are now able to receive relevant practical and business experiences. However, increasing the number of Virtual Firms could cause problems in some schools in providing additional classrooms and equipment. Schools should equip at least one additional classroom for Virtual Firm activities. A "Service Center" should have the main role in monitoring and supporting of activities in Virtual Firms. The VET center should be responsible for developing the Virtual Firm curriculum. Both the school and the VET center must collaborate and support teachers in implementation of virtual firm activities in the schools.

c. SOE program

The SOE program could be a very good tool in strengthening link between schools and industry. Having SOE teachers working together with SOE mentors in the private sector will enhance the instructional experience through the exchange of ideas. An important issue will be the appointment of responsible persons in schools and especially in companies. Commitment from both sides (i.e., the MoES and Business Associations) is needed for the successful implementation of SOE activities. VET center advisors were included in these activities since the very beginning and should play a ain role in monitoring and supporting of SOE activities in the future.

Vocational Student Organization (MASSUM)

Building links with businesses and business associations is crucial for providing sustainability for all SEA activities. VSOs help students organize themselves, develop a mission and set clear goals and know the way how to accomplish those goals. Doing so, allows VSO to better and more successfully approach businesses for intellectual and financial support. MASSUM is now an officially registered organization with a constitution, bank account and organizational structure. Trained teacher-advisors and students-leaders should continue to lead this organization. By September 2008 MASSUM will have an office in the medical school in Skopje and the SEA project will provide necessary equipment and furniture.

The *Educational Rendezvous* is an additional activity where a VSO can work with schools, faculties, municipalities, the businesses and projects to come together and support education. Such an event requires months of preparation and work hours to

organize such an event. In order to provide sustainability, the following issues need to be addressed:

- Participation of MoES (financial and with human resources)
- Sponsorship (identifying donors from industry that want to support this event)
- Accommodation (identifying a venue with good services and low cost)

A responsible VET advisor and executive board members should undertake the lead role in planning and coordinating these activities and guide VSO members throughout the entire process.

D. Challenges, Lessons Learned and Recommendations

There were a variety of challenges, lessons learned and subsequent recommendations, regarding the Career Development Component. These include:

- Motivating teachers to participate in additional non-paid activities. Teachers who were part of the Real Firms did not receive any extra compensation for their work. While this was often a disincentive for teachers' participation, future projects should work with teachers and school directors to allow each to embrace new active learning opportunities as part of their own professional development. Certificates and/or recognition should be considered in subsequent projects as a replacement for monetary compensation.
- Motivating MoES staff, business partners and other stakeholders to become more involved in SEA activities. The private sector and vocational schools would both benefit from stronger ties. Instituting activities such as structured internships, stronger career centers, and more emphasis on teacher/business leader workshops under the auspices of the Educational Rendezvous are recommended activities for future consideration. Future projects should consider the ongoing utilization of local businesses and involving school board members to advocate for and recruit local business leaders to provide support to career centers and internships, etc.
- Problems associated with changes in school leadership and/or responsible teachers. Teachers who are trained in career centers occasionally left to another, non-SEA school, thus diluting SEA's impact at times. Training thus, should be expanded to include not just one teacher per school/activity. For example, the pedagogue/psychologist, business teacher, school director and alternate should all be trained about the roles and uses of career centers/real firms. School boards should be involved as well. The focus should be on building the capacity of the school, so that learning and development is not dependent upon one individual.
- Communications between school directors and local authorities. School directors were often hesitant to implement the real firm activities at their schools for fear of running afoul of the Ministry of Labour regarding child labor activities. In general, school directors were timid to implement activities that were unfamiliar to them, mostly because allowing innovative activities provides few if any

professional benefits for them. On the contrary, given the political nature of the school director position, innovation may be misconstrued and used against school directors. To address this issue, the MOES should consider developing professional standards for school directors which will help de-politicize the position as well as encourage and reward directors who actively try to improve learning through new activities

III. School Management Component

A. Component design and structure

In support of S.O. 3.4, Macedonian Youth are better prepared for employment through education programs, and USAID I.R. 3.4.1. Improved Quality and Relevance of Instruction in Primary and Secondary Education, the School Management Component's goal was to achieve: SEA Objective 3: Better managed, more flexible school administration.

Component Activities

Director Certification School Management Manual & Training School Board Manual & Training

Better managed, more flexible school administration was especially important in Macedonia. During the project implementation period, the Macedonian educational system was undergoing a decentralization process to satisfy prerequisites to join the European Union. One of the effects of decentralization was the further empowerment of school directors, particularly in managing their infrastructure, human, and financial resources. School directors were often political appointees, many in need of managerial capacity building. In addition, due to the political nature of the position, school directors were often replaced. The SEA project targeted school directors as the main actors in building better managed, more flexible school administration. In support of this aim, SEA proposed school directors with topics including: planning, instructional leadership, and community/business involvement.

The stated target of the original contract was, "*By the end of the project period, all project directors in SERA schools will be trained in appropriate management instructional leadership, planning, and business and community involvement in schools*". The original work plan proposed that SEA train 15 directors in year one, 25 in year two, and continuing professional development activities for all school directors and potential school directors will continue in years three and four. SEA was further tasked to support professional development for school directors by engaging the technical services of local or regional resources for initiating a Center for Training of School Directors. From the onset of the project, SEA ensured that all activities were implemented in close collaboration with the MOES.

In the original project design, the structure of the School Management Component was part of the overall Professional Development Component, which integrated teacher development and school director development. The original design had one coordinator overseeing both of these professional development activities. Given the size and scope of both of the two tasks, SEA divided the component into Teacher Development and Director Professional Development and hired an additional coordinator (later re-titled director) to oversee the Director Professional Development activities. The Professional Development Component further evolved when it became apparent that improved school management was dependent upon good school governance through school boards. In consultations with USAID and MOES, SEA created the School Board Component led by a junior coordinator. In late 2007, SEA integrated the School Director and School Board activities under the School Management Component at the request of USAID.

The School Management Component was tasked with building the knowledge, skills, and abilities of School Directors to provide the leadership and support to their schools in providing quality education. Originally planned to include the certification for 85 secondary school directors, the program expanded to include over 300 primary school directors. Using a Slovenia model, SEA developed a training and certification program for school directors – which was codified in the Education Laws. SEA continued its support to school directors through School Management Manual which served as a basis for advanced training on Quality in School, School Finances and Legislation. In addition, SEA provided technical expertise to the MOES, developed a practical manual, and organized one-day awareness-raising trainings in support of School Boards.

B. Component activities and accomplishments

SEA's success under the School Management Component is measured against its original target, Support a training system for professionalization of school directors in order to increase the number of school directors trained in management practices through targeting 45 school directors working at schools assisted by the FOSIM and 40 SEA schools. SEA far exceeded this target, first through the Director Certification program under which SEA funded the accreditation training of 375 school directors and then provided follow-up training through the School Management Manual to additional beneficiaries. School Boards, an add-on activity, successfully raised awareness of the importance of school boards. Under the project's last work plan, SEA was also tasked with providing 3-day training to school board members. SEA faced many challenges in completing this training: changing priorities at the MOES, staff restructuring of the School Management Component, and the need to bring in international technical assistance to conceptualize, train TOT, and guide the development of the School Board Manual. These challenges meant many planned activities were delayed or shortened. Specifically, the planned 3-day trainings were changed to 1-day training. Yet, the School Board activities were successful in: raising awareness of the importance of school boards, leaving behind a high-quality manual that will serve as a resource for present and future school board members, and leaving behind a cohort of trained and knowledgeable TOTs.

Director Professional Development

- Slovenian School Director Training Model (May 2004 December 2004): Program consists of six modules delivered through a cycle of 6 three day workshops after which trainees take an exam and receive their licence over 375 directors trained with SEA funds, an additional 1,100 paid with personal funds.
- Model recognized by the MOES (September 2005): Demonstrated through its codification in the Education Laws and Bylaws.
- Certified Director Certification Program (DCP) trainers (May 2004 December 2004): Thirteen educators trained by local and international experts and in Slovenian School for Directors, and mentored by Slovenian experts to deliver training

- DCP trainers trained through SEA (April 2005 April 2006): 268 school directors trained.
- Six (6) training providers were accredited to deliver DCP training (March July 2006): DCP trainers established CPLE at SEEU and were also granted accreditation.
- Training program is self sustainable:1100 interested candidates took the training at accredited training providers and passed the directors exam. SEA covered expenses of the initial 268 and additional 107 qualified directors. Other interested candidates paid for their training on their own.
- Support for DCP training: State Education Inspectors trained in DCP through inservice training to help them follow and evaluate the work of school directors. The Exam Commission has a data-base for candidates who have passed the exam.
- School Management Manual: SEA developed the manual to be used as a tool to assist school management in their everyday activities in managing the school and to complement the Director Certification Program. The Manual has a special focus on the areas that were identified as weak in the Program, Legislation and Financial Management.
- Ongoing support for LIDER (Association of Secondary School Directors): SEA has signed two Memoranda of Understanding, signed in 2004 and 2005, in order to build local institutional ownership of the certification system.

School Board Support

- Conferences on good governance (December 2005 October 2007): SEA held regional information meetings the Spring of 2006 to inform school board members about their roles and responsibilities. In addition, SEA held a Round Table Discussion on Decentralization in Education in October 2007.
- Assistance to the MOES in redefining School Governance legislation (March 2008): SEA provided expert advice to the MOES covering the make-up of School Boards, harmonization with EU countries, and other recommendations on improving School Governance related legislation in support of the new Education Laws.
- School Board Manual (April June 2008): The goal of the SB Manual dissemination training is to empower SB members to take over their legally defined responsibilities and strengthen their capacities to cope with their responsibilities through dissemination of information and knowledge on their roles, duties and rights and sharing best practices. The manual covered topics such as: legislative framework; setting goals & priorities; effective school board; finances; accountability; and communications.
- School Board Training of Trainers (June 2008): SEA with STTA support designed and conducted a 3-day training program with accompanying training materials in support of the nation-wide school board training. SEA trained twenty-seven (27) trainers of trainers.
- School Board Manual dissemination training (July August 2008): SEA conducted nation wide training for school board members to raise awareness on the importance of school boards and train members on the content of the school board manual.

C. Towards sustainability

- SMC project implementation works closely with the main partner in all its activities, the Ministry of Education and Science. Over the five years, the School Management Component has successfully transferred much knowledge and information to school directors through the Director Certificate Program and a complementary School Management Manual and training. This knowledge has built school director capacity in administration, planning, legislation and finance. Yet a number of challenges remain: an absence of continuity in school administrative leadership as school directors have the skills to mentor teachers; confusion over the reporting relationship among schools, municipalities and the MOES as a result of decentralization; the need to define roles and responsibilities with school boards; and managing resources to address the MOES priority of providing a computer for every student.
- School management and governance, the position of the school director and to some extent of the School Board is highly politicized and sensitive areas. SMC knew that and before initiating the activities assured political will first through Memoranda of Understanding and amendments to the Education Laws and adopted Bylaws.
- Now that this "open market" approach was tried out, facts and numbers show that one institution that provides good training at reasonable price is the best solution for Macedonian small market. Three out of 6 accredited training providers closed down their programs for lack of candidates, two have very small groups hardly covering the expenses, and only one operates well. SMC will be open to this possibility and provided the time and funds allows that will support this new training provider.
- In addition SMC works through its two Task Forces (School Management Task Force and School Boards Task Force) composed of representatives of all stake holders in school management and governance to assure their support for the activities. They will also be involved in developing standards for directors and school boards.

D. Challenges, lessons learned and recommendations

SEA assisted the Ministry in developing and codifying Director Certification Process. However despite the obvious success of the training program, the skills and knowledge that directors acquired through the training significant changes are needed in the behavior of directors especially among the primary school directors. In addition, the certification process itself needs improvement.

There is neither transparency nor clear criteria for accrediting training providers. The process of re-accreditation is not defined. Accredited training providers also need training in delivery of Certification training using interactive, participatory approach that encompasses experiential learning process, building up on the knowledge and skills that participants already have and capitalizing on the exchange of experiences. The National Exam Commission would benefit from training in the certification program. It is recommended that this training be compulsory for everyone appointed in this commission prior to taking the post.

Management training for municipality education officers and local education inspectors should be provided to support the schools and its management in accomplishing the complex tasks imposed not only by decentralization, but by the demands for quality education made by students, parents and the labor market. In most cases these municipal education officers have very little experience and knowledge about school annual plans, improvement plans, school self evaluation, school staffing, new programs and vocations and they are the ones that review them and make final recommendations for approval.

Other recommendations include:

- Develop national standards for school management along with criteria beyond the legal requirements for the position of school director; defining detailed description of the skills necessary for the position that would largely help depoliticize the appointment of school directors.
- Develop mentoring system for school directors and networks where they exchange information, best practices.
- Develop system of in service training for school directors beyond certification, to keep them abreast to all changes and current developments in management and leadership area which is crucial to their position in decentralized schools.
- Explore ways how to develop a system of career development of school directors, making use of the best practices in European countries that will make foundation for security of the position for those working hard and delivering good results.
- Explore ways how to update the School Management Manual and have it as a living document that changes with the changes of legislation or practices learnt through different projects.

School Boards composition and their legally defined roles and responsibilities provide some basis for taking over the governance of the school. However in practice they are not taken seriously by neither local nor central education authorities. They are highly politicized mostly because of their role in selecting school director and possibility to influence teacher employment. Their other functions as defined by the Law are minimized to formality.

The Law itself is lacking provisions on accountability of School Boards. Their role is not clearly defined. They are dominated by representatives of the teaching staff from the school, often chosen by the director. Usually the president comes from the teaching staff from the school which may be considered as conflict of interest. On the other hand parents play minimal role despite their vested interest in the school through their children. To build the capacity of school board, emphasis should be put on mentoring rather than one-off trainings. Through mentoring, using the pool of SEA trained TOT, school boards can receive 'real-time' guidance and advice in addressing issues that arise during school board meetings.

IV. Research, Monitoring & Evaluation

SEA's research, monitoring, and evaluation (RM&E) team was responsible for providing essential information and feedback for effective and responsive project management. This responsibility involved developing and revising indicators, developing instruments for data collection, storage, and analysis, and reporting. RM&E activities also included the development of studies on subjects important to the Ministry of Education and Science. Such studies are intended to provide information and analysis on key issues impacting the development of the Macedonian educational system.

Of particular relevance to this, largely summative, final report, is a five-year evaluation study to assess the combined effect of USAID-funded education projects on the achievement of the Strategic Objective 3.4, *"Students better prepared for employment through education programs."* Led by SEA's RM&E team, the study was designed to estimate the effect of education projects in four main areas related to the experiences of teachers and students, that are thought to have role in preparing students for future workforce:

- Instructional methods;
- Computer access and use in teaching, and students' computer skills;
- Career preparation;
- Problem solving skills.

Annual surveys were conducted from 2005 to 2008 to assess progress in the first three areas, using a representative sample of teachers and students from 64 secondary schools participating in USAID-funded projects. In addition, a problem solving assessment for students was carried out in 2004 and 2008.

The results of the study show that:

- Teachers attitudes towards new instructional methods have not changed; teachers use of new methods, as reported by both teachers and students, have increased, while perceived obstacles for their use have decreased;
- Computer access and use in teaching, along with students computer skills have increased, while obstacles for computer use have decreased;
- Both teachers and students report about increased career preparation activities;
- There is no evidence for significantly improved students' problem solving skills.

A. Purpose and Overview of the Study

The evaluation of the impact of USAID-supported education projects was designed to measure changes as a result of program impact in four broad areas related to teachers' and students' school experiences important for students' future employability:

- Instructional methods;
- Computer access, computer use in teaching, and students' computer skills;
- Career development;
- Students' problem-solving skills.

Data on instructional methods, computer access and use, and career development were collected annually, beginning in the baseline year, 2004. Samples of teachers and students from graduating years (4 and 3 years program classes) who received the USAID interventions completed surveys designed to measure behavior, attitudes and skill levels relevant to the increased employability of students. Eleven indices (see table 5) based on the teacher and student surveys have been constructed to address the complete range of the activities undertaken by the education projects being implemented.

Students' problem-solving skills were assessed in 2004 and 2008 with an adjusted PISA problem solving test, thus enabling comparison between achievements of students before and after the projects' intervention.

The evaluation was led by SEA's evaluation staff with technical assistance from AIR's home office in Washington, DC. The SEA evaluation staff was responsible for instrument development, administrator training and logistics, data collection, quality control, data entry, and analysis.

Instructional methods
1. Teacher attitudes toward new instructional methods
2. Teacher use of new instructional methods
3. Student-reported use of new instructional methods by teachers
4. Obstacles for use of new instructional methods
Computer access, computer use in teaching, and students' computer skills
5. Teachers' computer access
6. Students' computer access
7. Computer use in teaching
8. Students' perceptions of their computer skills
9. Obstacles for use of computers in teaching
Career development
10. Teachers' emphasis on career preparation
11. Students' participation in career-related activities

Table 5: Eleven indices of program impact based on teacher and student surveys

B. Indices Demonstrating Program Impact

Eleven indices were constructed from the teacher and student surveys to address instructional methods; computer access, use, and proficiency; and career development.

The indices were designed to cover the complete range of the activities undertaken by the education projects being implemented.

Each index is a combination of responses to a set of questions about the same issue. An index score is a composite score calculated by combining responses to multiple questions related to the same issue. For each index, each respondent's responses to the questions were summed and converted to a 100-point scale, with higher values representing "more" of what is being measured. For most indices reported, increases in average index scores from year to year are desirable. For example, higher values on the use of instructional methods index in 2008 compared with 2005 indicates greater use of the new methods in 2008. For some indices it is desirable for the scores to decrease. For example, we would prefer values for the index on obstacles teachers see to using the new instructional methods go down each year; indicating that teachers see fewer obstacles over time. Table 6 presents the definition of each index.

INSTRUCTIONAL METHODS	
Teachers' beliefs aligned with new instructional methods	Based on teachers' responses to 10 statements that reflect either traditional approaches to teaching and learning or "new instructional methods" supported by the teacher training programs. <i>Increase in average index score indicates changes in beliefs about effective teaching and learning that align with "new methods"</i> .
Teachers' use of new instructional methods (teacher- reported)	Based on teachers' responses to questions about the frequency of various instructional methods and activities, some of which are traditional and others which are "new instructional methods". <i>Increase in average index score indicates greater use by teachers of "new instructional methods"</i> .
Students' reports of teachers' use of new instructional methods	Based on students' responses to questions about the frequency of various instructional methods and activities, some of which are traditional and others which are "new instructional methods". <i>Increase in average index score indicates students' reports of greater use by teachers of "new instructional methods"</i> .
Teachers' obstacles to using new instructional methods	Based on teachers' reports on the factors they view as obstacles to their use of the new instructional methods. <i>Decrease in average index score indicates a decrease in teachers' perceptions of obstacles</i> .
COMPUTER ACCESS, USE, A	ND SKILLS
Teachers' access to computers	Based on teachers' reports on their access to computers and related devices (e.g., Internet, printer) at home and at school. <i>Increase in average index score indicates greater access by teachers to computers</i> .
Teachers' use of computers for teaching	Based on teachers' reports on their use of computers and related devices for instructional purposes such as how often they have students do research on the Internet, create graphs and charts, and produce reports. <i>Increase in average index score indicates greater access by teachers to computers</i> .
Teachers' obstacles to using computers for teaching	Based on teachers' reports on the factors they view as obstacles to their use of the computers for instruction, such as access to computer labs, number of computers for students, own comfort level, flexibility of curriculum. <i>Decrease in average index score indicates a decrease in teachers' perceptions of obstacles</i> .
Students' access to computers	Based on students' reports on their access to computers and related devices at home and at school. <i>Increase in average index score indicates greater access by students to computers</i> .
Students' self-assessment of computer skills	Based on students' responses to questions about their proficiency performing computer- related tasks and using different types of software, such as word processing software to create a document, create macros, attaching files, using a Internet search machine to find something, using web authoring software. <i>Increase in average index score indicates</i> <i>increased perceptions of proficiency by students</i> .

Table 6: Definition of indices

CAREER DEVELOPMENT	
Students' access to and participation in career preparation activities	Based on students' responses to questions about career-related activities offered by the school and participation in activities focused on career preparation, such as participation in a school business or firm, whether they developed a portfolio, and if the school had helped them understand the job market locally, in Macedonia, and internationally. <i>Increase in average index score indicates increased students perceive greater access to and participation in these activities</i> .
Teachers' emphasis on students' career preparation	Based on teachers' responses to questions about their students' exposure to activities focused on career preparation such as understanding of job market, job interview skills, resume writing, and school businesses or firms. <i>Increase in average index score indicates increased teachers perceive greater access to and participation in these activities by students.</i>

C. Overall Results

Table 7 presents mean index score over the study years and comparisons between 2005 and 2008 on the 11 indices used to evaluate program impact, as well as the mean score on the problem solving test in 2004 and 2008. There was a statistically significant change on 10 of the 11 indices, all in the desired direction, and no significant change on the problem solving test. Discussion about each are presented below.

	2004	2005	2006	2007	2008	2008 significantly different than in beginning
INSTRUCTION						
Teachers' beliefs aligned with new instructional methods	/	66.48	66.36	66.89	66.01	0
Teachers' use of new instructional methods (teacher-reported)	/	63.41	65.64	65.99	65.00	A
Students' reports of teachers' use of new instructional methods	/	53.57	54.10	53.83	55.30	
Teachers' obstacles to using new instructional methods	/	45.59	38.88	37.79	38.72	▼
COMPUTER ACCESS, USE, AND SKILL	S					
Teachers' access to computers	/	50.26	60.62	60.80	56.97	
Teachers' use of computers for teaching	/	20.47	28.21	29.82	28.97	
Teachers' obstacles to using computers for teaching	/	56.66	49.85	50.90	51.70	▼
Students' access to computers	/	47.68	52.77	55.11	58.44	
Students' self-assessment of computer skills	/	42.20	45.97	50.09	59.14	A

Table 7. Changes from 2004 to 2008 on the indicators of program impact

CAREER PREPARATION						
Students' access to and participation in career preparation activities	/	44.46	46.84	46.93	53.25	
Teachers' emphasis on students' career preparation	/	40.02	47.56	50.10	48.54	
PROBLEM SOLVING TEST						
	16.98	/	/	/	18.66	0

▲ Mean index score in 2008 is significantly higher than in 2005, at .05 level.

▼ Mean index score in 2008 is significantly lower than in 2005, at .05 level.

O Difference between 2005 and 2008 mean scores is not statistically significant.

D. Discussion

The educational system in Macedonia has been influenced by various education interventions over the last 15 years. During that time no systematic analysis and evaluation of the impact of these projects had been undertaken. However, an intuitive awareness was present among educational workers, project staff, and the donor community that the impact of almost all projects diminished quickly after projects closed. Even though the majority of project implementers reported an increase in the values of indicators, particularly for the use of new teaching methods and computer use during the project implementation, teachers often stopped using the practices introduced through the projects and returned to traditional, teacher-centered methods of teaching after the end of these projects.

Concerning the teaching practice in Macedonia's schools, results suggest no particular change in teachers' beliefs about interactive instructional methods and, at the same time, increased use of these methods in teaching practice and decrease in perceived obstacles for use. It was assumed, at the time of developing the study, that an increase in attitudes/beliefs would precede an increase in the use of new methods. Changes in attitudes would imply acceptance of the new methods and their use would follow as a result of teachers' beliefs that these methods have advantages compared with more traditional methods. But results may reveal that teachers' attitudes were never the cause for the largely traditional teaching practice. Teachers may prefer new instructional methods and still not use it due to perceived or actual conditions in schools, or in education system in general.

Analysis of the reported obstacles for use of new methods shows decrease in obstacles related to training and support on a school level, which is likely connected with projects' activities. Reported obstacles not showing progress are those that are exogenous to projects' activities, such as inflexibility in the curriculum, large teachers/students ratio, or small classrooms that may undermine the effect of the projects after finishing. It just may be too bold for the teachers to go on with the newly acquired teaching practices without the support from the projects implementers or the educational institutions, and thus revert to old and safe traditional methods.

Another finding that seems to contradict the finding about increased use of new methods is that students reported greater use of new methods only at the end year of the study. However, this phenomenon can be explained by the fact that the statements in the teacher questionnaire ask teachers to respond on use of the new method in the last school year, while the student questionnaire asks student about the use of new methods by their teachers in all 4 (or 3 in three –year program classes) years of their secondary education. Thus, the students' responses in 2008 reflected their accumulated experience from the previous years of studying and were expected to score higher than the students from the first 3 years of the evaluation study.

Regarding ICT access and use in schools, both teachers and students reported better access, increased use and decreased obstacles for use of ICT in classes. This positive development in Computer access and use indices is likely connected to the increased number of computers, established internet connection in schools, as well as trainings organized for teachers in use of computers in teaching which were objectives of USAID interventions in the education system in Macedonia. It also can be a result of better organization and management of school ICT resources.

Analysis of the reported obstacles for use of ICT in teaching practice show that after an initial decrease in 2006, it seems that there is small but steady increase in perceived obstacles over the next 2 years of the study. The decrease from 2005 to 2008 in obstacles related to training suggests that the projects active in this area are having a positive impact. Still, great proportion of teachers reported about not enough access to computer labs and too few computers for the students. This is likely to change with the Government's efforts to introduce more ICT equipment in schools, but a new challenge is arising related to organization of classes and the applicability of the curriculum in these new conditions of teaching.

At the same time, as suggested by increases in Students' computer skills index, students are growing in confidence about their own ability with computers, which is likely related to their improved access to computers and internet, both at school and at home. Also, the initially great differences by gender in this index are becoming smaller, indicating female students become more alike male students regarding computer skills.

Career related activities in schools are now more frequent than in the beginning of the evaluation study, as suggested by increase in teacher's and student's career preparation indices. Better career preparation while still in school, translates directly into students' better prepared for future work.

Again there is difference in students' and teachers' responses in timing of the perceived change in the frequency of the career related activities, similarly to the Use of new instructional methods indices. This is likely related to students' accumulated experience with career preparation activities across the evaluation years and with projects' greater emphasis on direct work with students in the last year of the study.

The results also indicate that large proportions of students over the projects' years have learnt at school how to write a CV, how to pass a job interview, or how to prepare a business plan, and more in 2008 than in 2005, while it seems that career exploration, as

an important feature in career preparation, has not been given enough space in the present career preparation activities and there is room for improvement in this regard.

This evaluation study didn't find evidence for improved problem solving skills in students. Statistically significant difference was observed only at female students from vocational schools with Albanian language of instruction, indicating random variations in the mean score likely due to sampling. The test is saturated on factors related to basic mathematical and literacy abilities and, along with improved instructional methods, an efforts directed towards these areas may also be required.

E. Conclusions and Recommendations

Generally, the students finishing their secondary education in 2008 were better prepared for future employment as a result of the activities of USAID-supported projects. Results from the study illustrate statistically significant improvement in the majority of indicators used to track improvement in areas covered by USAID projects. This increase illustrates projects covered with this study (along with other factors) had positive impact on the education in Macedonia.

To sustain achieved positive change in the areas that showed improvement and to further develop education and workforce potential, SEA recommends the following:

- Focus attention in including and supporting interactive teaching methods into the educational system;
- Provide clear guidance and permanent training for the use of equipment in classes, as well as the translation of the curricula into digital materials for use in teaching;
- Career preparation needs specialized personnel that are capable to carry out complex activities of this area;
- More directed, long-term activities and systematic approaches are needed for improved problem solving skills in students; participation of Macedonia as a country in regular International students' assessments is strongly recommended.

Annex A: SEA Performance Monitoring Plan

USAID S.O. 3.4. Mac	edonian Youth are better prep	pared for employment through educat	tion programs						
USAID I.R. 3.4.1. Imp	roved Quality and Relevance	of Instruction in Primary and Second	dary Education						
Project-level Outcomes	Objectives	<i>Results</i> 2007 – 2008	Results 2007 – 2008Performance MeasureScheduleProgress to Date						
	lore engaging, relevant cla	assroom instruction (Teacher D	evelopment)						
SEA Objective 1.1: Frained teachers using elements of contextual	Teachers complete qualification	Complete teacher portfolios in Cohort 2 schools	90% complete portfolios for qualification	September 2007- December 2008	Completed.				
learning in the teaching process. Teachers complete qualification portfolios.		School self-evaluation of implementation the interactive methodology using indicators for success.	Survey followed by Regional meetings conducted by SEA with school team to reflect the action plans for improvement teaching.	January 2008 June 2008	Completed.				
		Complete Assessment qualification procedure by teacher trainers.	Teacher trainers complete assessment portfolio that prove use of assessment methods.	October 2007 – December 2007	Completed.				
	Teachers utilizing new techniques in student assessment.	2300 teachers will have the opportunity to attend local workshops on student assessment methods	Workshops conducted in schools by teacher trainers.	January 2008	Completed.				
		BDE advisors/Inspectors insure and support use of assessment methods in the schools.	Regional meetings conducted by BDE/VET Center advisors/Inspectors	October 2007 – June 2008	Completed.				
		Cohort 2 Teacher Trainers demonstrate 4 mentoring techniques	Cohort trainers observe Cohort 2 teacher trainers demonstrate at least 4 mentoring techniques	September - November 2007	Completed.				
Teachers implement local mentoring program.		IRA consultants conduct one day workshops in schools for teacher mentors (about 200) to improve the practice	Roster of teachers completing workshops	November 2007 and March 2008	Completed.				
		Mentoring of Inspectors/faculties/BDE/VET Center to support mentoring.	75% of Inspectors and Faculty Professors accompany IRA consultants during workshops.	Continuous	Completed.				
		Create content-specific database of lesson plans generated by teachers.	Content posted to database	September 2007 – June 2008	Completed				

JSAID I.R. 3.4.1. Improved Quality and Relevance of Instruction in Primary and Secondary Education						
Project-level Outcomes	Objectives	Results 2007 – 2008	Performance Measure	Schedule	Progress to Date	
	Institutionalize teacher professional development and mentoring system.	Policy makers and stakeholders create a document outlining a professional development program for teachers	Report from a series of meetings hosted by SEA	September 2007 – March 2008	Completed.	
		 Help establish a system for effective teacher professional development including the following components: Standards of professional development Procedures for documenting professional development Career development path for teachers Certification of teacher mentors 	Meetings and one day workshops for stakeholders hosted by SEA and coached by IRA consultants.	October 2007 – January 2008	Completed	
SEA Objective 2:	Effective career preparat	ion				
SEA Objective 2.1: Improved critical job	Provide opportunities for students to explore careers and	Career Centers				
seeking skills in students	develop leadership skills essential for career development	Career Centers develop program of activities for the year taking advantage of free school activities	Teachers/Directors/Student leaders attend regional meetings on POAs	October	Completed.	
		Assure modules on Job Search Skills into the first two years of high school and cover at least one generation of students each year.	Number of students in classes utilizing career development material form CC is equal to at least one generation of students	October-May	Completed.	
		 Material on industry for CC collected by students and teachers: information about local businesses information about industry directly related with profiles existing in school 	Activity included in Program of Activities (POA)	October	Completed	

USAID S.O. 3.4. Macedonian Youth are better prepared for employment through education programs							
USAID I.R. 3.4.1. Improved Quality and Relevance of Instruction in Primary and Secondary Education							
Project-level Outcomes	Objectives	<i>Results</i> 2007 – 2008	Performance Measure	Schedule	Progress to Date		
		 Information about local labor market needs 	List of materials collected.	Continuous but reported in April/May	Completed		
		Regional workshops about communication skills covering: - Importance of effective communication; - the leader as a communicator - Conduct of effective meetings; - Communication with key stakeholders etc.	Manual developed on these topics and regional workshop held	November- December	Completed.		
		Provide university faculties information on incorporating career center modules and activities in their courses	Fact sheets/guide and career guidance program developed and disseminated in faculties	December-April	Completed. VET Center has agreed to continue this activity.		
		Develop a guide or fact sheets on incorporating career center modules and activities in regular curricula and developing a career guidance program for "free school activities".	Fact sheets/guide and career guidance program developed and disseminated in career centers	November – February	Completed.		
		Endorsement and support of Career Center activities by MoES agencies/ Municipalities and School boards	Regional meetings with School Directors/ SB reps/ municipal education advisors held	October-November	Completed.		

USAID S.O. 3.4. Macedonian Youth are better prepared for employment through education programs						
USAID I.R. 3.4.1. Improved Quality and Relevance of Instruction in Primary and Secondary Education						
Project-level Outcomes	Objectives	<i>Results</i> 2007 – 2008	Performance Measure	Schedule	Progress to Date	
			Meeting with Inspectors/ BDE/ VET Center and other interested agencies (including donors) held	October	Completed. Identified VET Center as a key partner which will continue to support schools in supporting Career Center activities.	
		Assist Career Centers develop	st Career Centers develop Log of meetings or communications held May st in organizing Ed Rendezvous Number of secondary schools April-May St in organizing Ed Rendezvous Regional meetings held to compare April-May Career Center teachers/directors Regional meetings held to compare April-May	October-December	Completed. Identified VET Center as a key partner which will continue to support schools in supporting	
		communication capabilities		May	Cancelled.	
		Assist in organizing Ed Rendezvous		April-May	Completed.	
		Help Career Center teachers/directors share best practices with each other		April-May	Career Planning Workshops for school	
			PoAs / best practices posted on the MASSUM web page	Continuous	handed over to	
SEA Objective 2: Effective career preparation						
Objective 2.2: Students	Increase opportunities for	Work Based Learning (Supervised Occupational Experience (SOE) program)				

USAID S.O. 3.4. Macedonian Youth are better prepared for employment through education programs							
USAID I.R. 3.4.1. Improved Quality and Relevance of Instruction in Primary and Secondary Education							
Project-level Outcomes	Objectives	<i>Results</i> 2007 – 2008	Performance Measure	Schedule	Progress to Date		
Participating in applied skill activities and career preparation activities	students to have business experience while in high school	Incorporate SOE program into existing curriculum in concert with teachers, VET Center and MoES.	 handbook/guidebook for teachers and deliver at national workshops including: Communication and cooperation with industry; Identification of potential partners Facilitation of transition from schools to work 	October-November	Completed.		
		Delivery of regional workshops with SOE coordinators and business representatives	Six, one-day regional workshops delivered to define the role of each stakeholder in implementation of SOE program	February-March	Identified VET Center as key partner institution which will continue to support Career Center activities.		
			Round table sponsored by the US Embassy held with key industry and educational stakeholders to define the role of industry in education	February	Cancelled by US Embassy.		
		Industry actively engaged in career and vocational programs at the national level	Key stakeholders (chambers, craft assn and businesses) serving on advisory council(s) (MASSUM and/or VET Council)	October+	Completed. Business sector actively involved in MASSUM and representatives are on MASSUM's executive board.		
			Businesses sponsoring educational activities, CDEs and Rendezvous	October+	Completed.		
		Local businesses accept students to explore career opportunities.	List of participating businesses	Continuous but reported in April/May	Completed.		

USAID S.O. 3.4. Macedonian Youth are better prepared for employment through education programs							
USAID I.R. 3.4.1. Improved Quality and Relevance of Instruction in Primary and Secondary Education							
Project-level Outcomes	Objectives	<i>Results</i> 2007 – 2008	Performance Measure	Schedule	Progress to Date		
		Integrate the real firm business plan, financial analysis and record keeping into classroom activities	 Regional meetings organized by VET Center advisors and teachers and supported by SEA sharing best practices advising business teachers/RF teachers to incorporate record keeping, financial analysis and business plans into classes 	October+	Completed.		
		Help schools outside the SEA network establish school companies.	Workshop supported by SEA and organized by VET center advisors on record keeping/financial analysis and business plan follow-up.	October+	Completed.		
		Provide equipment for Real firms for new schools	18 new real firms opened	January	15 schools from 18 submitted successful proposals. Equipped 15 schools.		
		Analyze school company performance and share best practices.	Survey and analysis of all school companies conducted by SEA in collaboration with the VET center/Inspectorate and other stakeholders.	March/April	Completed.		
		Establish National Virtual Firm advisory board consisting of teachers, VET Center/ MoES rep to advise Service Center and MoES on integrating VF into mandatory curriculum and function	Record of meetings	October+	Completed.		

USAID S.O. 3.4. Macedonian Youth are better prepared for employment through education programs							
USAID I.R. 3.4.1. Improved Quality and Relevance of Instruction in Primary and Secondary Education							
Project-level Outcomes	Objectives	<i>Results</i> 2007 – 2008	Performance Measure	Schedule	Progress to Date		
		Collaborate with Kultur Kontakt to print and deliver textbooks for mandatory classes	Record of deliver	October	Cancelled. SEA did not get approval form Kultur Kontakt for additional text books		
		Facilitate participation in international VF fairs	Number of VF's (students) participated on VF fairs.	Feb +	Cancelled.		
		Support final year of VF	\$300 per school (x7)	October	Completed.		
SEA Objective 3: B	etter managed, more flex	ible school administration (Dire	ctor Professional Development a	nd School Board S	Support)		
	Provide scholarships for schools that do not have a certified director and have not had one person trained for director certification	Maximum of 85 scholarships potentially provided.	Count of scholarships	October 07- January 2008	Completed. 19 scholarships provided between October and February, totaling 108 scholarships disbursed.		
		Finalize School Management Manual	Completed manual	December 07	Completed. Manual printed in Macedonian and Albanian		
SEA Objective 3.1: Training of directors for certification and demonstrated competency	Support for school management	Disseminate School Management Manual to primary and secondary school directors (up to 450); pedagogue/psychologists; inspectors; BDE advisors; municipal ed advisors and school board reps.	Roster from dissemination workshops.	January - August2008	Completed.		
		Organize three days (24)hours of training on SMM					
		Provide the opportunity for the inspectorate to integrate performance indicators into inspection system.	Facilitate with Inspectorate	December-January	Completed.		

USAID S.O. 3.4. Macedonian Youth are better prepared for employment through education programs							
USAID I.R. 3.4.1. Improved Quality and Relevance of Instruction in Primary and Secondary Education							
Project-level Outcomes	Objectives	Results 2007 – 2008	Performance Measure	Schedule	Progress to Date		
	Enhance the quality of the director certification program.	Review/update director certification program in collaboration with MoES and SEEU Center for professional leadership in education	Written document	December+	Ongoing discussions with MOES delayed because of early elections.		
	Facilitate the development of a professional development program for directors.	MoES & BDE Unit and SEEU CPLE elaborate continuous professional development programs in concert with the school director associations.	Document with recommendations	December +	Trained and handed over SM Manual to SEEU CPLE trainers.		
SEA Objective 3.2 Empower school boards to fulfill new responsibilities	List issues and solutions on school governance and management in a decentralized environment	Organize roundtable on decentralization in education focusing on ways to improve school governance and management in collaboration with the US Embassy and representatives of key groups of school administration groups (mayors/municipality, school boards, MoES, directors, chambers) to define solutions to issues of school governance in a decentralized system.	Round table discussions; documents drafted	October 07	Completed. Report submitted to USAID and US Embassy		
	Develop School Board Manual	In collaboration with stakeholders, finalize School Board manual as a tool to empower school boards	School Board Manual drafted	February 08	Completed.		
	Local capacity building for training in school governance and management related issues Organize training for trainers in 2 phases to prepare SBM dissemination workshops.	Agenda and roster of attendees phase 1 with experienced trainers identified by SEA	October 07	Completed.			
		Workshop agenda and roster of additional trainers recruited to work with the first group	January 08	Trained 38 trainers 16 – 18 June.			

edonian Youth are better prep	pared for employment through educa	tion programs		
roved Quality and Relevance	of Instruction in Primary and Secon	dary Education		
Objectives	<i>Results</i> 2007 – 2008	Performance Measure	Schedule	Progress to Date
Strengthen School board members capacities to cope with their responsibilities	Organize 3 days (24 hours) of training for school boards through dissemination workshops on School Board Manual	Roster of attendees	February- August 08	Completed one day training fro school boards.
Develop communication/ information network for school boards at municipal level	During training provide an opportunity for the school boards to form a network of school board members on municipal level	Number of municipal school boards networks	October 07 – April 08	Completed.
Provide sustainable support for school boards	Develop resource center(s) for school boards (especially legal services in schools)	Agencies identified to facilitate information exchange and functioning.	May- June 08	Completed.
Strengthen the position of School Boards in Macedonian Laws and harmonize it with EU	Organize technical assistance for drafting the articles on School Governance in Education Laws	ToR and Agenda for technical assistance	February 08	Completed. Consultant contracted Report completed and presented to MOES
ffective Project Managem	ent Systems (RME)			
ffective Project Managem	ent Systems (RME)		1	1
	Report on Annual Survey	Report	November 2007	Completed.
Conduct SO 3.4 Annual Survey	Conduct annual survey of teachers and students using self-reporting instrument	Survey conducted	April-July 2008	Completed
	Conduct problem-solving test on sample of students	Test sessions conducted	April-July 2008	Completed
Conduct project component activity monitoring	Monitoring training in student assessment methods (TDC)	Survey for participants	April-June 2008	Completed.
	roved Quality and Relevance <i>Objectives</i> Strengthen School board members capacities to cope with their responsibilities Develop communication/ information network for school boards at municipal level Provide sustainable support for school boards Strengthen the position of School Boards in Macedonian Laws and harmonize it with EU Efective Project Managem Efective Project Managem Conduct SO 3.4 Annual Survey Conduct project component	roved Quality and Relevance of Instruction in Primary and SeconObjectivesResults 2007 – 2008Strengthen School board members capacities to cope with their responsibilitiesOrganize 3 days (24 hours) of training for school boards through dissemination workshops on School Board ManualDevelop communication/ information network for school boards at municipal levelDuring training provide an opportunity for the school boards to form a network of school boards to form a network of school board members on municipal levelProvide sustainable support for school boards in Macedonian Laws and harmonize it with EUDevelop resource center(s) for school boards (especially legal services in schools)Strengthen the position of School Boards in Macedonian Laws and harmonize it with EUOrganize technical assistance for drafting the articles on School Governance in Education LawsFective Project Management Systems (RME)Report on Annual SurveyConduct SO 3.4 Annual SurveyConduct annual survey of teachers and students using self-reporting instrumentConduct project componentMonitoring training in student	Strengthen School board members capacities to cope with their responsibilities Organize 3 days (24 hours) of training for school boards through dissemination workshops on School Board Manual Roster of attendees Develop communication/ information network for school boards at municipal level During training provide an opportunity for the school boards to form a networks of school board members on municipal level Number of municipal school boards networks Provide sustainable support for school boards Develop resource center(s) for school boards (especially legal services in schools) Agencies identified to facilitate information exchange and functioning. Strengthen the position of School boards in Macedonian Laws and harmonize it with EU Organize technical assistance for drafting the articles on School Governance in Education Laws ToR and Agenda for technical assistance Fective Project Management Systems (RME) Report Conduct annual Survey Report Conduct SO 3.4 Annual Survey Report on Annual Survey of teachers and students using self-reporting instrument Survey conducted Conduct project component Monitoring training in student Survey for participants	Proved Quality and Relevance of Instruction in Primary and Secondary Education Operation Objectives Results 2007 – 2008 Performance Measure Schedule Strengthen School board members capacities to cope with their responsibilities Organize 3 days (24 hours) of training mowshops on School board Mrough dissemination workshops on School Board Monual Roster of attendees February- August 08 Develop communication/ information network for school boards at municipal level During training provide an opportunity for the school boards to form a network of school board members on municipal level Number of municipal school boards October 07 – April 08 Provide sustainable support for school boards Develop resource center(s) for school boards (sepecially legal services in schools) Agencies identified to facilitate information exchange and functioning. May- June 08 Strengthen the position of School Boards in Macedonian Laws and harmonize it with EU Organize technical assistance for drafting the articles on School Governance in Education Laws ToR and Agenda for technical assistance February 08 Tective Project Management Systems (RME) Conduct so 3.4 Annual Survey Report November 2007 Conduct problem-solving test on sample of students Conduct problem-solving test on sample of students Survey conducted April-July 2008

USAID S.O. 3.4. Macedonian Youth are better prepared for employment through education programs								
USAID I.R. 3.4.1. Improved Quality and Relevance of Instruction in Primary and Secondary Education								
Project-level Outcomes	Objectives	Results 2007 – 2008 Performance Measure Schedule Progress to Date						
Establish effective project monitoring systems		Study on frequency of use of different teaching strategies (TDC)	Survey + focus group for sample of teachers	November 2007	Canceled as irrelevant in consultation with TDC staff			
		Assisting teacher professional development standards task force to develop indicators for MoES and other agencies (TDC)	Indicators recommended to task force	October 2007 – January 2008	Completed.			
		Additional surveys and research (TDC) Collecting data and information needed by the component	October 2007 – May 2008	Completed.				
		Data and information on CC, RC and VC activities, performances and best practices collected (CDC)	Informing teachers/directors at regional meetings of CC, RC and VC responsible teachers about the survey	October 2007	Completed.			
			Survey and focus groups with CC, RF and VF responsible teachers	March – May 2008 April-July	Completed			
	Finalizing M & E process	Collecting data on final situation in SEA schools	Organizing final visits to all SEA schools	May – June 2008	Completed through targeted visits to schools and trainings.			