

> Israeli Ministry of Education

Ministry uses survey solution to strengthen educational and administrative programs

Situation

The Israeli Ministry of Education (MOE) oversees curricula, educational standards, and teaching personnel in educational institutions throughout the State of Israel, including kindergartens, primary and secondary schools, and some post-secondary institutions. Headquartered in Jerusalem, the MOE provides oversight and support to approximately 3,800 schools and 130,000 teachers serving 1.5 million students (not including kindergarten students).

The MOE's information technology division supports every school and internal division or unit within the organization. Members of the technology staff perform a broad range of services ranging from administration of information systems and applications to data collection and statistical analysis. Survey research is one of the critical services this division provides for all Israeli schools, as well as the various internal divisions within the MOE.

Challenge

In its efforts to deliver the highest quality education to all students, the Ministry of Education polls students, teachers, counselors, and principals for their perceptions on a variety of topics. Typical student survey projects measure school climate—the environment in which a student studies—to ensure schools have adequate teacher support, security, and an atmosphere that contributes to student success. Many surveys are also directed at teachers or school principals to understand curriculum, facility, or technology needs or challenges.

Because of the many different types of schools it oversees—including religious, traditional, and Arabic schools, and institutions ranging from preschools to higher education—the logistics of conducting these projects can be complex. For example, the MOE is working to ensure that every school has an adequate number of computers and Internet access. Some schools, however, may not be connected to the Internet for religious reasons, requiring surveys to be administered on paper. Surveys must also be provided in both Hebrew and Arabic, and questions must be adapted so that they are appropriate for all religious and ethnic groups, as well as for various educational levels.

Employees in the IT division do much more than simply create and deploy the surveys—they also frequently develop the questionnaires, perform sampling, conduct pilots, and analyze and deliver results. Initially the team used SPSS Data Entry™ to design surveys and forms quickly and easily. But as the volume of survey projects and respondents grew and surveys became more complex, the MOE realized that a more comprehensive and cost-effective solution would be required.

At a glance

Country: Israel
 Industry: Education
 Employees: 130,000 teachers,
 2,500 civil servants
 and administrators
 Students: 1.5 million
 Schools: 3,800
 Web site: www.education.gov.il

Application

Survey creation/deployment/
 analysis

Solutions used

Dimensions™
 SPSS Base

Solution

An evaluation of leading products by an objective third-party consultant found that Dimensions, the survey research platform from SPSS, met all of the MOE's key requirements: support for Hebrew and Arabic, multiple sampling techniques, appropriate look and feel, and the availability of technical support in Israel.

Starting with several small projects, the MOE introduced Dimensions and now uses it for survey projects of all sizes. The IT team builds questionnaires in Hebrew and Arabic and deploys them on a cluster of servers running Dimensions software. Surveys can be administered either by IT or by the client, depending on the complexity of the sampling and the size of the population(s) involved.

Links to questionnaires are posted on an MOE intranet or sent to respondents via e-mail. Survey participants then complete the questionnaires at schools, community centers, or other locations. Responses are returned to the MOE, where staff analyze them with SPSS statistical analysis software and create reports of the results for clients.

For very large projects, such as a recent counseling services survey that polled tens of thousands of Israeli students on school violence and drug use, the data collection team may delegate the deployment and logistics to MOE supervisory personnel who work with individual schools to administer the questionnaire.

Upon completion of individual school surveys, principals receive downloadable reports of results created in SPSS and delivered via the MOE Web site. Schools use the reports to determine whether or not intervention is required, and then either implement the changes internally or work with the appropriate MOE unit to implement a solution. Once intervention occurs, the school may decide to re-deploy the survey and compare the pre- and post-intervention results.

Likewise, internal MOE units that conduct survey projects also receive reports they can use to better understand their situation and guide them in developing new policies. The Director General of the MOE, for instance, may query all school principals before the start of the school year on the number of computers

in their schools and use that information to improve technology infrastructure. MOE trainers receive results of their trainees' satisfaction and modify their training programs accordingly. In the Curriculum Division, teacher feedback helps administrators identify academic issues that may need to be addressed.

Results

Since adopting Dimensions, the MOE can manage far more survey projects than ever before and deploy them faster and more cost effectively. In 2006, it conducted four large initiatives and a dozen or so smaller projects, with nearly 250,000 total questionnaires completed.

"One large project alone, which we administered on paper prior to adopting Dimensions, now helps us save approximately \$250,000 a year," said Chaim Gatt, PhD, director of research and statistics in the Ministry of Education's IT division.

"We have been able to improve our survey projects significantly. Many projects that we could not do before we can do now with Dimensions, which makes it easier, faster, and more cost effective to measure opinions. More schools are participating, it's easier to modify questionnaires, results are more accurate, and our clients are more satisfied because they get reports faster."

Now that the MOE has seen the tremendous advantages that Dimensions offers, plans are under way to expand the solution's use. Broader use of its scripting capabilities, for example, will enable analysts to build many different types of questions. Dimensions can also potentially be used to administer exams via the Web.

"Measurement is critical to give us an accurate picture of the way things are in the field and identify areas for change or improvement," stated Gatt. "Dimensions is an excellent tool that enables us to measure and immediately understand what is occurring and then take appropriate action."

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