

Future Problem Solving Program International (FPSPi) Program Evaluation Report: Executive Summary (June 2011)

This evaluation was conducted for the Future Problem Solving Program International (FPSPi) by the Center for Creative Learning, Inc., of Sarasota, Florida. The evaluation team members were Donald J. Treffinger, James H. Crumel, and Edwin C. Selby. This report summarizes the rationale, design, and results of an international program evaluation study of FPSPi. The project addressed three major purposes. These were to survey key stakeholders in the program (Affiliate Directors, coaches, students, and parents) to ascertain their views of: (a.) the extent to which FPSPi meets its stated goals (i.e., does what it purports to do); (b.) the strengths of the program and areas in which improvement may be needed; and, (c.) the impact of the program on its participants. We designed surveys for each stakeholder group, and for a small group of program alumni for whom we obtained contact information. We reviewed the survey forms with the FPSPi research committee and staff and conducted a small preliminary pilot study in order to verify completeness and accuracy. Then, we collected data in January and February, 2011 using a web-based survey site. For logistical reasons and confidentiality concerns, we asked Affiliate Directors to distribute invitations to all program participants to respond to the survey, and, in turn, for coaches to invite their students and parents to respond. The initial requests were followed up by multiple reminder requests from the International Office and from our project team. We received responses from participants in the United States and several international affiliates; specifically, responses came from 34 Affiliate Directors, 48 program Alumni, 220 Coaches in 33 Affiliates, 633 students from 27 Affiliates, and 195 parents representing 23 Affiliates. There were responses from the eight largest Affiliates, 14 of the largest 15 (≥ 100 teams) and 17 of the 27 smallest Affiliates (< 100 teams). Our surveys included a number of items that were asked to ADs, coaches, and students concerning various aspects of the FPSPi program. These enabled us to seek both commonalities across program participants and the unique insights and views of each sample group. We also asked a number of specific questions that were unique to ADs, parents, and program alumni; we will summarize those after the general survey results.

Overall Program Satisfaction. Overall satisfaction with the program was high among all respondent groups, with the overall average ranging from 3.31 to 3.76 (out of a possible 4), or a satisfaction of 82.8% to 94%. The quantitative results were supported by positive open-ended statements from all respondent groups.

Program Goals and Outcomes. We asked ADs, coaches, and students 12 questions that dealt specifically with the program's goals and outcomes in relation to the each of three component of FPSPi (Global Issues Problem Solving [GIPS], Community Problem Solving [CmPS], and Scenario Writing [SW]). The items included: developing teamwork and collaboration (working together, cooperating with each other); developing leadership skills; enhancing the skills of preparing and delivering materials and/or presentations that communicate ideas effectively; showing evidence that team members are able to apply FPS skills in other situations; developing the skills needed to manage time effectively; fostering creative thinking (the ability to generate many, varied, and unusual options); fostering critical thinking (the ability to sort and sift information or to focus one's thinking); developing research and inquiry skills (the ability to gather information from many and varied sources); using a deliberate process for Creative Problem Solving methods and tools; developing skills in listening and following directions; learning about complex issues that will shape the future; and, developing an active interest in the future. The Scenario Writing component's questions varied slightly (including writing skills, for example, and omitting teamwork and collaboration). Responses to these items indicated that all three components of the FPSPi program were rated above average or higher in relation to all 12 goal and outcome statements.

The highest rated goals for GIPS were: *complex issues shaping the future, teamwork and collaboration, active interest in the future, learning a creative problem-solving process*, and fostering

creative thinking. For CmPS, the highest rated items were: *teamwork and collaboration, leadership skills, presentation/communication of ideas, applying skills in other situations, making a difference in shaping the future, and fostering critical thinking*. For SW, the highest rated areas were: *active interest in the future, complex issues shaping the future, presentation/communication of ideas, expanding and enhancing writing skills, and, thinking and researching futuristically*.

Survey Responses from Affiliate Directors. We asked ADs several questions specific to their role, in addition to questions that addressed topics we also addressed with coaches and students. We received responses from 34 ADs (including co- or associate ADs in some cases); they represented a broad range of experience and involvement in FPSPI in various other roles (and more than 60% reported five years or more of experience in the AD role). They reported that their work offered them a variety of personal benefits, most frequently: enjoy watching FPSers grow as creative individuals, learning to think more creatively themselves, applying their FPS experience in other settings, appreciating students' ability to overcome difficulties, and discovering "the amazing things" that students can accomplish. Their personal satisfaction with the workload, time demands, and expectations of the AD role was moderately positive (3.09 out of 4). The most frequently cited things they liked best about being ADs were: interactions with students and coaches, working with positive adults, guiding process learning, being part of a program that has great value for children and youth and makes a difference in students' lives. The areas they found most challenging about the AD role were: recruitment and promotion of the program, dealing with time demands and management, the stress of multiple demands and deadlines, and funding for the program. Administratively, on a five-point scale, the ADs were positive about: communication among ADs (3.53), the International office and staff (4.41), and the Board of Trustees (3.56); the helpfulness of support material for them and for teams (4.41 and 4.21); and, the value of Governing Council meetings (4.00). They considered the cost of participating in FPSPI to be reasonable and appropriate (4.35). Their evaluations of Practice Problems, Qualifying Problems, Affiliate Bowl Problems, and the IC Problem were all very positive (ranging from 4.21 to 4.41). The ADs identified a variety of strengths of the IC program, including: its specific events and activities; opportunities for international experience and networking; the organizational and staff commitment and effort invested; and the opportunities for participants to travel and experience new places. The most frequently noted areas for improvement in IC were: choices of site and location (including some interest in a "truly international" experience outside the USA); more help for staff to manage the workload and variety of activities at IC; addressing challenges relating to tours; and, obtaining sponsorships or scholarships.

Survey Responses from Coaches. Coaches reported that they derive great satisfaction from watching their students learn and grow creatively and academically. Coaches expressed high expectations for their students and faith in their potential. They also reported benefitting personally. Overall, the coaches responding to this survey felt that the FPSPI program does what it purports to do, with the majority reporting that the program does a good or great job on the areas that were measured by this assessment. This was true across all three program components. Challenges reported by coaches included the amount of time involved, problems connected with funding, and keeping students prepared and motivated. Coaches also offered suggestions to improve the program, including the use of technology across several program areas and the need for improved training, especially for new coaches.

Survey Responses from Students. The students who responded reported positive feedback regarding the program. The survey results confirmed that each of the program components met the program's purported goals and objectives. In addition to meeting the program's goals and objectives, the students indicated that they had gained other important lifetime skills. Several students pointed out that the program met their need to be intellectually challenged. While the students noted the program's overall strengths, they also cited a number of areas where the program could be improved. Although a strength of the program is its structure, for example, the data suggested that the effectiveness of the

program often hinged on competent, well-trained, committed coaches (which was not universally present).

Survey Responses from Parents. We also asked parents some questions that were unique to their role and perspectives regarding their children's participation in FPSPI. The parents who responded were moderately positive in their view of the FPSPI program, as well as in their perceptions of their youngsters' satisfaction with the program. Instances in which parents reported that their children would not (or probably would not) continue their involvement in FPS, if they had the opportunity to do so, were typically the result of an issue or concern unique to their specific setting, rather than to a general or programmatic issue. The parents generally recognized the same areas of strength in the program as were identified by ADs, coaches, and students. While many parents reported no major areas needing improvement, several important opportunities and areas of concern did arise, including: parent communication and opportunities for involvement, expanding publicity and awareness of the program (and program expansion), training and effectiveness of teachers and coaches, role in the school curriculum, and some concerns for topic appropriateness and relevance (particularly for younger students).

Survey Responses from Alumni. While their overall experience was positive, several of the alumni saw areas for possible improvement. The major areas of concern had to do with improving the quality and helpfulness of evaluation feedback, and ways to improve the website and the program's use of technology. Although this was a small, non-random sample, these alumni reported that program participation had value over the long term, and that the program's goals have been met. They established lasting friendships, acquired important life-long skills, and have been able to apply those skills with confidence in both academic and work settings.

Program Strengths. Taken together, the data from our surveys document, then, that there is broad and strong overall satisfaction with the FPSPI program. It is widely perceived that FPSPI serves important purposes effectively for its participants. Respondents reported that the program's goals, rules, and procedures are clear, easy to understand, and fair. The feedback and evaluation participants received at Affiliate Bowls and IC, as well as those events themselves, received praise as program strengths. Affiliate Directors, coaches, students, and alumni offered comments as to the value in traveling to and competing in these events, as well as the overall organization of the events themselves. Several students and coaches also noted that FPS is fun! Overall evaluations of practice problems, qualifying problems, and Bowl problems were all positive (although open-ended responses raised some questions regarding topics and specific age group relevance). In relation to technology, the responses of all groups acknowledged that the program has begun taking action to expand and enhance applications of technology in a variety of ways, and emphasized the importance and value of future efforts in those areas. Each of the program's major components, Global Issues Problem Solving (GIPS), Community Problem Solving (CmPS), and Scenario Writing (SW), was also viewed positively by all respondent groups.

Limitations and Areas for Improvement. Each of the respondent groups noted some limitations and areas of concern to contribute to improving FPSPI or one of its components. (Keep in mind that these are concerns and possible areas of improvement within a program for which the overall evaluation results are very positive.) The major areas of concern included: *ongoing growth* of the program ("marketing" FPSPI or building knowledge and awareness of the program and, recruitment and retention of adult volunteers, teams, and team members); stress from *managing time and multiple demands*; need for more *training and ongoing support* of coaches, especially new coaches; *funding* was another area of concern, in relation to operating resources as well as to support student participation and the travel; efficiency of *communications* and email flow within the program, as well as the flow of communications between the program and parents; *technology-related* concerns (including online programming, website, and the role of social networking); *location and logistics of IC*; and, *evaluation and feedback*. We also noted

differences among students' responses suggesting that students who participate voluntarily may differ in their attitudes and responses from students whose participation is a school requirement. Finally, a trend that we noted in the data indicates a possible limitation in the degree of satisfaction with the program experienced by parents and students. While the overall satisfaction among all groups was positive, it was highest among ADs, next among the coaches, and lowest among students and parents. Parents who reported that students would not be continuing in their participation often noted that it was because of the execution of the program in the local setting, not because of the program itself. Communications with parents appears to be limited, as is their involvement. Many parents reported not knowing enough about the program to tell others about it.

Program Impact. The ADs, coaches, parents, and alumni all provided evidence indicating positive impact of FPSPI in a variety of ways. Many adults wrote about the value and personal satisfaction of observing students' growth and accomplishments and their pride in the outstanding efforts of the participating students; they often described the program's impact on students with high praise, and commented also on their participation's impact on them as adults as well. Respondents appreciated the varied ways that FPSPI responds to student strengths and talents, the importance and value of providing international or cross-cultural experiences for students and travel experiences, the opportunities the program provides for young people to learn and apply a structured process for problem solving, and challenging young people to develop a futuristic outlook and to be forward-looking in addressing global challenges and issues. Based on the open-ended comments offered by each of the groups surveyed, we noted wide agreement that the program's benefits extend well beyond the stated program goals. Among the extended benefits, respondents emphasized a variety of life skills including: time management, self-direction, self-management, leadership, socialization skills, the use of technology, a broader academic experience that is both challenging and interesting, and (particularly among those involved in Community Problem Solving) community service. We conclude, therefore, that the respondents provided evidence (albeit informal, anecdotal evidence) that participation in FPSPI has had positive impact on young people—in personal relationships, in subsequent academic experiences, and in their work or career experiences.

Recommendations. We presented 30 recommendations, subsumed under the following nine broad categories.

- A. Address the program's needs in relation to funding, marketing, and publicity.
- B. Expand the view and presentation of the program's goals and unique elements as a foundation for program development as well as a tool for marketing and promotion.
- C. Examine carefully the potential tension between required and voluntary participation in the program.
- D. Investigate the need for training, support, and mentoring for coaches and other program personnel.
- E. Examine closely the role and uses of technology
- F. Examine the strengths, concerns, and opportunities relating to program-wide management and administration.
- G. Continuously review and reassesses procedures, rules, and evaluation/feedback
- H. Develop a systematic approach to build and maintain effective relationships with parents.
- I. Develop a systematic approach to build and maintain effective ongoing contact and relationships with students who have participated in FPS ("alumni").