

V. CONCLUSIONS AND FUTURE PLANS

The designed Information Systems Security Program is still at the initial phases of development and the analysis work is in progress. The developmental approach of the program promises important opportunities for and contributions to future work.

The use of design-based research will provides the following advantages;

- designing the program in collaboration with researchers, program target groups, information security experts and education experts,
- integrating design principles to find solutions of complex learning objectives,
- testing and revising the proposed program by the iterative process approach.

The design-based research approach to develop an Information Systems Security Program will provide an appropriate and useful means of designing a practical training program in the context of the learning environment itself. As Van den Akker [10] defines, the purpose of a design-based research activity is to reduce, ‘uncertainty in decision making in designing and developing educational interventions’. Similarly, design-based research is a type of risk management that enables the researcher to control the risks in the design of an educational program. In this respect, the outcome of the research will be applicable in practice. This is ensured by developing a solution, then testing and revising the solution in practice, which will result in the final program.

The PISSP will be implemented in 3 years' time for all the public enterprises and governmental organizations in Turkey. The program is funded by the Turkish Ministry of Development. The major aim of the program is to increase the information systems security level of public enterprises and governmental organizations in Turkey.

With the Training Project the employees of public enterprises and governmental organizations will be trained on system security concepts. The Documentation project will provide necessary systems security guidelines on how to secure the information assets of public enterprises and governmental organizations. The Risk Analysis project will secure the information systems of public enterprises and governmental organizations by penetration testing and then taking preventive measures for the determined vulnerabilities.

It is clear that information security education is a need and there are many studies [11] [12] [13] demonstrating or focusing on the importance of information security education. For public enterprises and governmental organizations it is a vital need since their information assets are critical for the whole country.

The PISSP is a work in progress and the results of the program will provide valuable information about the current information security status in Turkey, and more secure information systems infrastructure in the public enterprises and governmental organizations.

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