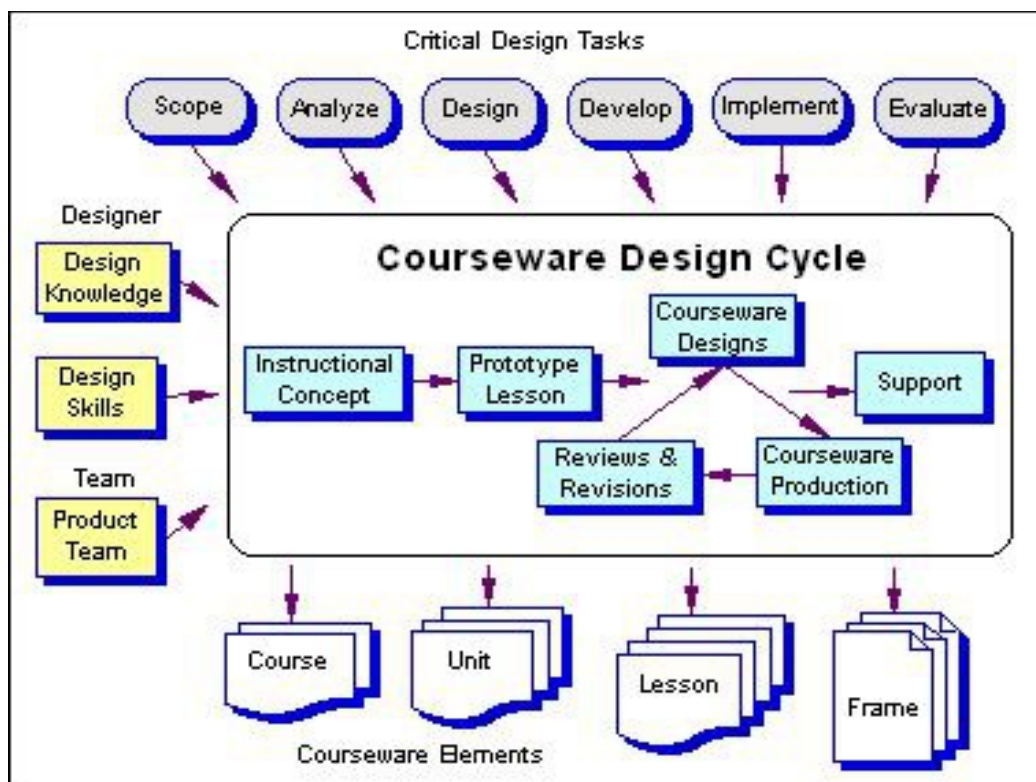# What is the ISRD Expert Design Method?
White Paper

The ISRD Expert Design Method was developed by Dr. Kurt Rowley and a team of researchers at Instructional Systems Research & Development, inc., as part of a Navy SBIR project. The method is a research-based, well-organized process model that helps training development teams follow expert practices as they design training systems. The method includes a complete set of standardized practices and procedures for following a rapid prototyping approach to system design. The method also incorporates 8 proven success factors of expert designers, and utilizes a series of worksheets to provide guidance with key instructional design tasks. The ISRD Expert Design Method is intended for use by courseware design and development teams without extensive training in instructional design.

Use of a standardized method based on expert practices is the real-world solution to the challenge of conducting successful courseware development projects. The following graphic is a high-level depiction of the method.

The ISRD Expert Design Method

The ISRD Expert Design Method supports the development and review of multiple design prototypes in an 'Integrated Product Team' environment. Frequent reviews of prototypes by a multi-discipline design team helps ensure that design objectives will be accomplished. Expert instructional design activities are supported in the context of rapid prototypes, including determination of project scope, analysis of tasks and learners, selecting a design (instructional strategy) organizing knowledge, planning and developing content, supporting production, roll-out, and evaluation.

How can the method help my training organization?

The method will help your training organization incorporate expert practices into your operating procedures. A set of computer-based seminars is included with the method, with orienting and support materials for each of the team members involved in a typical courseware development project. Supported team members are instructional designers, subject-matter experts, authoring tool programmers, media developers, graphic artists and animators, evaluators, managers, and corporate IT representatives. The method supports the design of courseware that follows one or more of 10 powerful research-proven approaches to teaching with computers, including simulations, interactive video, scenario-based, story-based, and game-based training, and others. When properly designed, courseware following the 10 strategies is naturally motivating to students. The strategies also can provide a realistic context for learning and facilitate the transfer of what is learned into actual on-the-job performance.

The design and development of courseware is an expensive and risky software venture. Utilizing best practices, such as the ISRD Expert Design Method, can help ensure that there is a return on the investment in training development.

Scientific Basis

The ISRD Expert Design Method is the result of original research into expert instructional design practices by ISRD. A three-year experimental study was conducted with 25 experienced and expert instructional designers. The designers had extensive backgrounds in courseware design and development. Effective procedures for each of the critical design tasks in the method were detailed by the experts in the study. The experts also identified how all of the design tasks are interconnected in the context of a rapid prototyping design cycle.

In addition to the research basis, this model reflects the experience of the ISRD study team. The ISRD team has a working knowledge and successful track record of working as members of courseware development teams following the 10 supported instructional strategies. Most designers only learn and follow one or two familiar instructional strategies. By supporting the 10 best strategies we have found, the method empowers design teams to broaden their capabilities, the design task becomes manageable, and the probability of success is greatly improved.

Model Includes

- Computer-based seminar for orienting and training team members for use of the Expert Design Method.

- Materials introducing the principles and success factors of expert-level instructional design.

- Materials for supporting the unique role of each major participant in the courseware design process.

- Worksheets providing job-aids and detailed guidance for key instructional design tasks. These are very helpful for less experienced team members.

- Materials to support fundamental design skills such as interviewing, reviewing literature, instructional writing, etc.

- Reference information for incorporating 30 key learning research findings into course designs.

Using the Method

Contact Dr. Kurt Rowley for information about using the ISRD Expert Design Method and the related CDST software for your training or education development projects (www.KurtRowley.com).