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	Original Evaluation Plan (October 2008)	
Evaluation Activity	**Product**	**Evaluation Activity**
Objective 1: Guide Faculty in Educational Action Research & Faculty Inquiry Groups	▪ Determine extent to which faculty are successfully integrating scenarios to the broader context of programs and courses. ▪ Examine factors that sustain faculty in the process of examining their practice with regard to implementing scenario-based learning. ▪ Determine extent to which project encourages action research by faculty in furtherance of project and curricular goals. ▪ Determine extent to which faculty practice influences student outcomes	▪ Appropriately thick descriptions of faculty success with integration of scenarios in applicable contexts. ▪ Behavioral analysis of processes used to determine factors bearing on the ability of faculty to sustain implementation and integration of scenario-based learning. ▪ Analysis and comment on effectiveness with which project discovers needs for assistance and acts there upon. ▪ Qualitative (interview) and qualitative (survey based) analysis and report delineating perceived and actual changes (improvement) in student outcomes.
Objective 2: Supplement with expert panel reviews of SBL tasks, assessments, & support documents	▪ Examine project's success in assisting stakeholders to align scenarios to industry standards and in uncovering and promulgating techniques for effective localization to employer needs. ▪ Examine successful practices in utilizing stakeholders for effective development and dissemination of materials and assessments.	▪ Report on number and attendance at panels or equivalent meetings and subsequent success in alignment to standards. ▪ Behavioral observation of methods used by stakeholders to localize scenarios to specific employer needs, and results there of. ▪ Report on effectiveness of dissemination methods in terms of impact on intended audiences.
Objective 3: Transform online community by linking ATE projects and centers and expanding the library of SBL resources	▪ Determine extent to which project enables stakeholders to become connected to broader network of scenario- and problem-based learning practitioners via workshops and classes. ▪ Examine methods whereby project effectively disseminates results and outcomes to stakeholders and broader technician educator community. ▪ Examine/determine success of Web-supported community on effective Task Development ▪ Determine extent to which project facilitates methods for stakeholders to add to proposed library of resources. ▪ Determine extent to which Web-supported community facilitates sharing of workshop, successful practices, and sharing of support materials.	▪ Examine and describe the ways in which enhanced connections via workshops, classes, and Web-supported activities result in improvement in faculty practices and improvements in student learning. ▪ Examine and describe extent to which enhanced connections encourages and develops action research by associated faculty. ▪ Examine and describe additional project outcomes, findings, and results, including but not limited to models and successful practices usable by the broader technician education community and other disciplines. ▪ Statistical and qualitative report on utilization and efficacy of Web-supported community relative to task development. ▪ Qualitative (survey and commentary) on degree to which Web-supported community supports dispersion of successful practices and sharing of materials. ▪ Quantitative report on additions to resource library and extent to which others subsequently use the contributions. Follow-up with specific user cases as appropriate to describe effectiveness.

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Revised Evaluation Plan (March 2010)					
Claims-Based Evaluation Question	**Methodology**	**Time**	**Analytical Methods**	**Data**	**Performance Measure**
What determines the characteristics of an effective scenario?	Structured in person and telephone interviews with faculty and other relevant stakeholders	Initial research Year 1 Follow-up research in Year 2 and Year 3 to document evolution of the scenario development process.	Structured interview protocol using existing research on scenario development as the framework.	Numerical analysis of answers compared to existing research and documentation of free response answers	Faculty and stakeholders will exhibit documentable understanding of process required to develop effective scenarios
How do the online community of practice and the faculty ambassadors support effective scaling of the project's work?	Survey of faculty, analysis of online usage statistics, analysis of online discourse.	Initial research Year 1 Follow-up research in Year 2 and Year 3.	Structured survey instrumentation based on Dede's elements of scale. Analysis of online threaded discussions and related discourse.	Numerical analysis of responses compared to Dede framework and expository analysis of online discourse	The online community of practice will exhibit continuous and increasing evidence of achieving scale.
How and in what ways do participating students derive benefits attributable to scenario-based instruction?	Student and where feasible employer surveys, think-aloud assessments, faculty analysis and comment	Initial research Year 1 Follow-up research in Year 2 and Year 3. Final report to include retrospective analysis over the life of the project.	Student and faculty surveys and in person interviews and feedback from potential or existing employers, analysis of think-aloud assessments, grounded in employer participation and in research on 21st Century workplace requirements and established technical knowledge mastery course and program outcomes	Numerical analysis of survey data. Qualitative and qualitative analysis of think-aloud assessments.	A significant number of students exposed to treatment will exhibit deeper subject matter mastery and readiness for 21st Century workplace.
In what ways is industry input used? How has this involvement benefitted teaching practice and student outcomes?	Evaluator's Field and action research, structured interviews and documentary evidence gathering.	On-going throughout the project. At least one live observation and one set of interviews per year. Final report includes retrospective analysis of these data.	Live structured interviews with industry participants and employers. Observation of industry involvement with classes. Documentary data gathering from students and other stakeholders.	Expository analysis of data gathered through methods as determined for correlation of industry input to student performance	A significant number of students exposed to treatment will exhibit 21st Century skills in depth, to the satisfaction of potential employers.

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Final Evaluation Plan (June 2010)				
Evaluation Issue	**What will be investigated**	**Activity - Instrumentation Relevant Analytics**	**Subject Data or Baseline Data**	**Performance Target or Outcome**
A. Rolls up claims 1&3. Short Name = Impact of SBL on Students and Faculty	1. Grades/rubrics 2. Faculty/industry 3. Effectiveness metrics 4. CLASSE model (?) 5. Faculty discussion	• Classroom observations • Faculty survey • Faculty interviews • Student surveys • GORP data • ASSET/COMPASS for controlled study? • Think Aloud results	A. Student Performance B. Definitions of success C. Institutional data D Student engagement E. SLOs that matter	A. Graded assessment of technical skills will improve and Performance based assessment will improve B. Faculty & employers will be able to agree on meaningful success metrics C. Retention/persistence will improve D. Engagement will improve E. We will derive formula for getting to what matters
B. Rolls up claims 2,4,5 Short Name = Process and Scale	1. Website Wizard 2. Project website 3. Tapped In community 4. Ambassadors	• Web analytics trend up • User survey results positive • User interviews positive feedback • Activity tracking shows usage • Sociometric analysis of Tapped In discourse shows meaningful use • Ambassador activity analysis trends up	A. Analytics and tracking B. Analytics and tracking C. Discourse analysis D. Activity & impact	A. Usage shows increasing number and frequency B. Usage shows increasing number and frequency. Users indicate formation of community. C. Discourse shows increasing development of community and usability D. Ambassadors are in demand and impacting increasing numbers of teachers and students
C. Rolls up 6 Short Name = Employer Role and Relationships	1. Employer needs incorporated into activities and outcomes 2. Quality of scenarios improve 3. Positive impact on student learning	• Evidence-based process model • Employers approve scenarios • Evidence of real-world activities and assessment • Student surveys, interviews, performance metrics and hiring rates all positive rate	A. Observation of scenario development process B. Greater evidence of authentic activities and assessments C. Positive employer feedback and greater number of students hired	A. Evidence of working process for incorporating industry needs B. Scenarios show evidence of close industry involvement in key activities, SLOs and assessment C. Employers praise program and want to hire students, students want to take program citing positive benefits