Developing Decision Making Using Online Contextualized Case Studies[*]

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Abstract

Educational Theory into Practice Software (ETIPS) is an online case study program in the testbed stage of development intended for use by professors of education administration. The program is being developed by Sara Dexter and Pamela D. Tucker of the University of Virginia and is being tested by various other universities throughout Virginia. As a testbed member, the author will outline the theoretical framework, elaborating on the advantages of interactive, authentically contextualized online case studies over traditional print scenarios. Emphasis will be given to the outcomes of the program, which are to strengthen candidates' skills in data analysis, problem solving, and collaborative decision making. ETIPS enhances practical leadership skills for those who serve on the front lines. With the rapid growth of online principal preparation programs, this tool clearly represents a change in preparation.

NOTE: This module has been peer-reviewed, accepted, and sanctioned by the National Council of Professors of Educational Administration (NCPEA) as a scholarly contribution to the knowledge base in educational administration.

Educational Theory into Practice Software (ETIPS) is an online case study program in the testbed stage of development intended for use by professors of education administration. The program is being developed by Sara Dexter and Pamela D. Tucker of the University of Virginia and is being tested by various other universities throughout Virginia. As a testbed member, the author will outline the theoretical framework, elaborating on the advantages of interactive, authentically contextualized online case studies over traditional print scenarios. Emphasis will be given to the outcomes of the program, which are to strengthen candidates' skills in data analysis, problem solving, and collaborative decision making. ETIPS enhances practical leadership skills for those who serve on the frontlines. With the rapid growth of online principal preparation programs, this tool clearly represents a change in preparation. Readers will learn not only from the testbed study itself but will gain valuable information to maximize the use of traditional print case studies as well.

Considering the bleak analysis of the state of educational-administration university programs offered in Arthur Levine's (March, 2005) report entitled Educating School Leaders, developments such as ETIPS

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serve as a fitting response. Levine concluded in his critique that the curriculum in university programs was irrelevant and desperately lacking in meaningful experiences connecting theory to practice. Within weeks of these scathing statements, Levine (April, 2005) wrote the following comment in The Chronicle of Higher Education:

Whether or not university-based school-leadership programs choose to clean their own houses, change will occur. The simple fact is that those programs are being replaced. Yet my hope is that universities and their educational-administration programs will embrace change rather than watch the states and the marketplace take away their franchise (p. 20).

Levine is correct that universities must embrace change rather than to curse the proverbial darkness or to justify outdated methods. The ETIPS project is an effort to embrace that change, to invigorate the educational-leadership preparation process, and to provide a meaningful tool to transition from university classrooms to field experiences. Although intended for and presently being tested in university settings, ETIPS is being designed to perform just as effectively in non-university preparation programs.

The framework for these online cases answers Levine's concerns by being grounded in research related to complexity, contextualized knowledge, and self-regulated learning. Unlike linear print cases, which have become standard in both business and school administration university programs (Zuelke & Willerman, 1995), the virtual yet realistically complex school settings provided in ETIPS simulates the multifaceted schools in which principals serve (Putnam & Borko, 2000). The structure of the case studies requires candidates to rely on all forms of knowledge: experiential, declarative, procedural, and contextual (Waters, Marzano, & McNulty, 2003). Additionally, the problem-solving processes employed within the cases advance self-regulated learning (Pintrich, 2000).

Although traditional text-based cases can certainly provide meaningful decision-making simulations, they are inherently bound by a number of limitations. A most obvious limitation is that of a linear presentation restricted by chronological, lock-step progress through the scenario with the problem posed and the data under consideration being prescribed by the text. The type of thinking required of such traditional cases is retrospective in nature, reacting and contemplating only past events and circumstances. The problem is situated in a single school context with limited data about that particular school. The procedural scaffolding is modeled, managed, and coached by the professor.

In contrast, the ETIPS model transcends traditional text-based cases. The online case studies afford a decision-making experience that includes a non-linear presentation, prospective thinking, multiple contexts, numerous data, and scaffolding driven by the environment. While the case focus is established by the professor, it is an ill-structured situation that intentionally does not identify what the specific problem is. The initial step in preparing the case for the students is for the professor to select a topic and subtopic; there are ten potential subtopics from which to choose:

CASE TOPICS & SUBTOPICS		
Instructional Leadership	Organizational Leadership	Relational Leadership
Student Sub-Group Achievement	School Excellence & Future Direction	Cultural Sensitivity & Responsiveness
Instructional Innovation	Resources & Mission Alignment	School & Family Engagement
Positive School Culture	Self-Study for School Improvement	
		continued on next page

Professional Development Planning	HR Staffing & Development	

<div align="center">Table 1</div>

Once one of the 10 subtopics is selected, the professor then contextualizes the issue in any of the 9 schools; a possibility of 90 different scenario combinations exists. At this point, the professor may plan to have an entire class address the same topic in the same school or may assign different cases to groups. A greater variety of scenarios within the class will enrich discussion and will serve to illustrate how the same scenario in a different context is handled. Multiple issues exist within each of the schools; it is from among these multiple issues that the learner is to identify the main underlying concern to be addressed. The 9 schools from which the professor may contextualize the issues are as follows:

ELEMENTARY SCHOOLS		
Roosevelt Elem Sch	Seneca Elem Sch	H. Usher Elem Sch
Low Performance	Average Performance	High Performance
Rural	Suburban	Urban
MIDDLE SCHOOLS		
Reyes MS	Santiago MS	Cold Springs MS
Average Performance	High Performance	Low Performance
Rural	Suburban	Urban
HIGH SCHOOLS		
Rainer HS	Stromburg HS	Underwood HS
High Performance	Low Performance	Average Performance
Rural	Suburban	Urban

<div align="center">Table 2</div>

Below is an example of an ill-structured scenario:

Topic: Organizational Leadership

Subtopic: School Excellence and Future Direction

School Context: Seneca Elementary School, suburban, mid-performing academically

Case Scenario: Imagine that you are a member of the leadership team at Seneca Elementary School, in a suburban location. A new principal has just been hired who connected well with individuals in both the central office staff and the local community during the interviews. Many people viewed the school as simply drifting along and expressed a desire for her to take the school to the next level. During the first administrative team meeting, the new principal has asked for opinions from team members on future directions that would be shared and supported by the community. Your task is to identify the primary issue(s) that need to be addressed and the action steps to take in order to develop areas of excellence within the school.

The specific problem itself is identified by the learners as they explore the content on both the fictitious school's public website and internal intranet. The school's website includes 34 data sources, and the intranet includes 10. Once students know the topic, subtopic, school context, and case scenario, ETIPS prompts them to plan a strategy for analyzing the data. They are asked to click on 8 of the following 44 data sources that will reveal valuable information related to the scenario:

SCHOOL WEBSITE						
About the School	Students	Staff	Curriculum & Assessment	Technology Infrastructure	School Community Connections	Professional Development
Mission Statement	Demographics	Demographics	Standards	Schoolwide Facilities	Family Involvement	PD Plan
School Improvement Plan	Performance	Mentoring	Instructional Sequence	Classroom-based Facilities	Business Involvement	Resources
Facilities	Schedule	Leadership	Computer Curriculum	Community Facilities	Higher Education Involvement	Leadership
	Student Leadership	Faculty Schedule	Classroom Pedagogy & Assessment	Technology Support Staff	Community Resources	Learning Community
		Faculty Meetings		Policies & Rules		PD Process Goals
		Faculty Contract		Technology Committee		
				Technology Survey Results		
				Technology Plan & Budget		

Table 3

SCHOOL INTRANET			
Student Data	Staff Data	Policies	Financial Records
Discipline	Supervision & Evaluation	Instruction	Budget
Attendance	Teacher Improvement Goals	Personnel	
Grades & Achievement	Staff Assignments		
	Leadership Team Profile		

Table 4

The experience of selecting 8 of the 44 data sources simulates the complexity of an authentic problem-solving situation in which administrators are required to have an awareness of what data will best assist them in the decision-making process. As the students explore the data, they also can click on icons that will reveal teacher discussions about the topic in a chat-room environment. This exposes them to both the formal data and also the informal interpretation and reception of it by the faculty.

In addition to the non-linear, learner-determined exploration of content, the process is prospective in nature—considering potential, likely, or expected conditions based upon trends, faculty concerns, and present conditions. Thus, forward thinking is much more a component of the complex ETIPS cases than of traditional text-based cases.

Building on Vygotsky's (1986) theory of mediated learning, the concept of scaffolding in the student's zone of proximal development is integrated into the cases. Procedural scaffolding is provided by the task's structure and process. The structure of the 44 data sources serves to develop habits of mind. As students repeatedly return to the data sources to learn more about the school and its issues, they formulate patterns of awareness regarding which data sources will best inform them on certain issues. The decision-making process integrated throughout also serves as a scaffold as students complete the following steps:

- Identify the key underlying ISSUE that needs to be addressed.
- Acknowledge guiding principles and CRITERIA for decision-making. These criteria are to be drawn from the school's mission statement and goals, from the administrator's dispositions, and from declarative professional knowledge that relate to the issue.
- Explore ALTERNATIVES and their associated opportunities and constraints.
- Select the best DECISION and create a plan of action.

Because the ETIPS cases are aligned with Interstate School Leaders Licensure Consortium (ISLLC) standards, candidates who progress through the decision-making model are provided multiple opportunities to display their competency in the standards. They also increase their ability to perform well on the School Leaders Licensure Assessment (SLLA). More importantly, practice using these case studies strengthens thought patterns for problem solving and collaborative decision making that candidates will take with them into the field. As the ETIPS testbed project continues, pre-test and post-test data will become available to support these claims.

1 References

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APPENDIX

Case Studies: Decision-Making Model

Use the following model and rubric to guide you in developing your case study responses. Ensure that your response follows this format. (This model and rubric were retrieved 7/22/2008 from http://leadership.etips.info/[1])

Steps in the Decision-Making Process

Identify the ISSUE that needs to be addressed

- Consider many possible explanations of what is happening, including inherent assumptions within each
- Deduce fundamental underlying nature of problem
- Seek an appropriate amount and nature of data in order to make the decision
- Identify the desired goals that define the scope and scale of necessary decision

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[1] http://leadership.etips.info/

- Deduce additional data needed
- Identify team of people who should become involved

Identify the guiding principles you will apply as **CRITERIA** to the decision making process

- Identify appropriate guiding professional (declarative) knowledge
- Identify appropriate guidance to be derived from school goals and mission
- Identify dispositions that influence thinking

Identify **ALTERNATIVES** with associated opportunities and constraints and analyze their merits using the guiding principles

- Consider alternatives that address problem/issue
- Allow for new and creative ideas
- Identify opportunities and constraints for each alternative
- Analyze alternatives using guiding principles and stakeholders' perspectives

Select the best alternative **DECISION** for the context and create a plan.

- Select alternative most consistent with guiding principles
- Create a plan of action

Questions for Discussion

1. Describe what you determined to be the fundamental issue in this case and how you arrived at that interpretation. Who were the other people you thought should become involved in addressing this issue? What data sources did you consider key and how did you make sense of them?
2. Summarize the criteria you selected regarding the school goals and mission, professional (declarative) knowledge, and dispositions. Explain how these will guide your decision making.
3. What school- or community-based programs, practices, tools, structures, procedures, policies, systems, and so forth create opportunities and constraints in the consideration of alternative solutions?
4. How did the facts of the case and your criteria come together in how you formulated your next steps to (1) set direction, (2) develop people, and (3) make the organization work?
5. Did your conception of the issue change throughout the case? If so, what factor influenced the change? How could systems of the school be established or what could become more routinized to improve the ability of the school to deal with this issue in the future? What values drove the decision-making process?

Case Scoring Rubric

Criteria	Level 0	Level 1	Level 2
Issue: Explains the central issue in the case	Does not present an understanding of the central issue	Presents a vague or superficial understanding of the central issue	Clearly articulates an understanding of the underlying central issue
continued on next page			

Criteria: Identifies guiding principles in the case that affect the decision	Does not identify guiding principles in the case that affect the decision	Identifies a limited number of guiding principles in the case that affect the decision, including relevant aspects of the school mission	Identifies multiple sets of inter-related guiding principles that affect the decision, including relevant aspects of the school mission
Alternatives: Analyzes a range of alternatives that address the problem, noting their advantages and disadvantages	Does not present an analysis of the advantages and disadvantages for various alternatives	Presents an incomplete analysis of advantages and/or disadvantages for various alternatives	Presents a detailed analysis of the advantages and disadvantages for various alternatives
Decision: Selects the "best" alternative to address the challenge and includes strategies to "Set Direction"	Selects an alternative that is inconsistent with guiding principles and/or lacks any strategies for developing, communicating and supporting a vision for the school	Selects an alternative that is consistent with guiding principles and identifies limited strategies for developing, communicating and supporting a vision for the school	Selects an alternative that is consistent with guiding principles and describes detailed strategies for developing, communicating and supporting a vision for the school
Decision: Selects the "best" alternative to address the challenge and includes strategies to "Develop the People"	Selects an alternative that is inconsistent with guiding principles and/or lacks any strategies to support and develop staff members in achieving the stated goal	Selects an alternative that is consistent with guiding principles and identifies limited strategies to support and develop staff members in achieving the stated goal	Selects an alternative that is consistent with guiding principles and describes detailed strategies to support and develop staff members in achieving the stated goal
Decision: Selects the "best" alternative to address the challenge and includes strategies to "Make the Organization Work"	Selects an alternative that is inconsistent with guiding principles and/or lacks strategies to create a positive organizational culture and manage people, time and material resources to achieve the sated goal	Selects an alternative that is consistent with guiding principles and identifies limited strategies to create a positive organizational culture and manage people, time and material resources to achieve the sated goal	Selects an alternative that is consistent with guiding principles and identifies detailed strategies to create a positive organizational culture and manage people, time and material resources to achieve the sated goal

Table 5

Retrieved 7/22/2008 from http://leadership.etips.info/[2])

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[2]http://leadership.etips.info/