The Demand-Control Schema: Effective Curricular Implementation

Robyn K. Dean, Robert Q Pollard, Jr., Jeffrey Davis, Marie Griffin, Carol LaCava, Brian Morrison, Jean Parmir, Amanda Smith, Stacey Storme, and Leah Suback (See below for institutional affiliations)

Abstract: In October, 2004, the University of Rochester (UR) and the University of Tennessee (UT) collaborative project, *Reforming Interpreter Education: A Practice Profession Approach* (http://www.urmc.rochester.edu/dwc/scholarship/Education.htm) reaches its conclusion. The purpose of this three-year project, supported by the Fund for the Improvement of Post-Secondary Education (FIPSE), was to embed Dean and Pollard's (2001) "demand-control (D-C) schema for interpreting work" throughout UT's baccalaureate interpreter preparation program (IPP) curriculum and examine its resulting impact. A series of five courses were developed or adapted by the UR researchers and implemented by the UT faculty. UT's Basic Interpreter Training Program (BITP) was similarly adapted. As the project progressed, a number other IPPs and interpreter mentors also began employing elements of the D-C schema. This article was coauthored by the UR developers, the UT IPP faculty, and five other IPP faculty or mentors who employ the D-C schema and teaching methods in their work.

Reforming Interpreter Education One Course at a Time: The UR-UT Collaboration

Jeffrey Davis, Marie Griffin, and Carol LaCava

University of Tennessee

This UR-UT curriculum reform project has made possible the development and piloting of a sequence of courses in UT's baccalaureate interpreter training program and modification to UT's

eight-week summer intensive interpreting preparation program. UR faculty Robyn Dean and Robert Pollard have provided the conceptual leadership in course development and "train-the-trainer" services. The UT faculty has focused on integrating the D-C schema into our interpreter training courses and fieldwork. Faculty from both institutions are collaborating on evaluation and dissemination activities. The following courses were developed by the project and piloted in UT's baccalaureate interpreter training program from 2001 – 2004.

Application of Demand-Control Theory to Sign Language Interpreting (3 credit hrs). In this course, students are introduced to Dean and Pollard's (2001) demand-control schema for interpreting work which is based on Karasek's (1979) demand-control theory. Students are introduced to the complete spectrum of interpreting work challenges and learn how specific factors within interpreting work environments affect them, their consumers, and their resulting translations. These challenges, called demands, are framed into four categories (environmental, interpersonal, paralinguistic and intrapersonal or EIPI), to guide students to analyze interpreting work systematically. Using the demand-control schema as a work analysis tool allows students to begin incorporating practical knowledge of work environments into their growing skills repertoire. This is a prerequisite course; the schema that is taught in this course is employed throughout the remainder of the course sequence. This course was offered during the Spring 2002 and Summer 2002 - 2004 semesters and team taught by Jeffrey Davis, Robyn Dean, and Marie Griffin.

Medical Interpreting via Observation-Supervision (3 credit hours). In this course, students learn about medical interpreting by applying the D-C schema during observations of medical situations. Equipped with the understanding of the factors important to interpreting work and the schema to discern them, students shadow medical doctors into their appointments with hearing patients. Consistent with problem-based and expeditionary learning techniques, students are exposed to basic medical knowledge, typical doctor-patient interactions and conversations by direct observation (contrasted with traditional classroom instruction methods) which has shown to improve student's practical understanding, integration, and retention of information. This course was offered in the Fall, 2002, semester and team taught by Robyn Dean and Jeffrey

Davis. (For further information about observation-supervision, see Dean, Davis, et al., 2003 and Dean, Pollard, and English, in this volume.)

Educational Interpreting via Observation-Supervision (3 credit hours). Like medical interpreting work, there is a great demand for interpreting in educational settings. Understanding the challenges faced by interpreters in these settings is vital since the majority of interpreters will find themselves working in this type of environment. In this course, students will spend the majority of their time in settings on the university campus and in local public schools observing the environment, the people, and the types of interactions that typically occur. Like the first PBL course, students employ the D-C schema during their observations. This course was offered in the Spring, 2003, semester and team taught by Carol LaCava and Robyn Dean.

Educational Interpreting Field Work (6 credit hours). Students enrolled in the six credit hours of Interpreting Field Work employ the D-C schema in their work and in their analysis of field work. The final coursework being developed in this sequence revises the six credit hours of required field work by asking students to implement the schema in their field work as well as in a field work group supervision seminar. Students enrolled in field work attend a weekly supervision seminar where discussions about their growing knowledge and understanding of interpreting work are framed in a demand-control format. These courses were offered in the Fall, 2003, and Spring, 2004, semesters and taught by Carol LaCava.

<u>Discussion of the course sequence</u>. While the final stages of project implementation and evaluation are currently underway, the UT faculty offers a few preliminary observations. These courses were designed to be offered sequentially and have been piloted as such. That is, the Application of Demand-Control Theory course is the pre-requisite to the other courses. The Medical Interpreting course and Educational Interpreting course could be offered interchangeably as long as students have the background and application offered by the Application of D-C Theory Course. It has been the consensus of the UT faculty that this course content also could be adapted and applied to other specialized settings such as legal or mental

health.¹ We also have found excellent application to interpreting in multicultural settings. Furthermore, based on the feedback received thus far from a variety of audiences (ranging from our students to practitioners and educators) Dean and Pollard's observation-supervision approach has application to a wide variety of interpreting settings.

We also have experimented with other curriculum approaches. For example, infusing or "post-holing" UT's eight-week summer intensive interpreter preparation program with the D-C schema and offering D-C content through directed independent studies and distance education/on-line formats. The UT faculty has made excellent application of the D-C framework in the Principles of Interpreting and Interpreting Skills courses. These courses are enhanced significantly following the D-C schema for interpreting work. UT was fortunate to receive the UR support through the FIPSE grant to carry out these program innovations and curriculum reform. The UT faculty looks forward to the infusion and continuation of the D-C schema into all aspects of the interpreting program well beyond the end of the FIPSE grant cycle. We see this as being an ongoing or "spiraling" curriculum approach.

We recognize that most IPPs do not have adequate instructional personnel or resources to add additional courses and modify existing fieldwork requirements as was done at UT. Unfortunately many IPPs only have one full-time faculty member. A disproportionate number of interpreting courses are taught by adjunct faculty members who are less easily brought into major curriculum reform than are full-time faculty. Still, as with other practice-based professions such as medicine or teaching, having adequate field work, supervision, and mentorship are tantamount to the success and longevity of our graduates. This points to the need to have faculty adequately trained in the most effective and efficient means to conduct field supervision. The D-C schema and observation-supervision address that need and offer an exciting and meaningful way to bridge the gap between classroom and fieldwork experiences. It has been our experience that the D-C schema and observation-supervision provide powerful observational analysis and descriptive tools for teaching and mentoring interpreters. This offers the field an exciting multidisciplinary

¹ Another UR project is testing the application of observation-supervision in mental health settings. See Dean, Pollard, and English, in this volume, for a preliminary report.

approach to meet the challenges of preparing interpreters and a succinct and cogent framework for the analysis of interpreting work that enhances observation, supervision, and mentorship.

Benefits, challenges, and unexpected outcomes. There are far too many benefits of the D-C schema to give a full account of them in this brief segment. Most significant is that it gives a new and more meaningful framework to talk about interpreting and places feedback in a neutral space. The observation-supervision approach that was part of this project promotes more effective learning of specialized practice/content areas – that is, students learn from a variety of settings regardless of the presence of interpreters or deaf consumers. This approach levels the playing field and controls for experience. Though the project is still being evaluated, the UT IPP faculty has been awed by the positive feedback from practicing interpreters and students of interpreting (at all levels) who by and large report excellent results from following the schema. We have been impressed by the range and level of application.

The project benefited from the excellent curriculum support offered by Robyn Dean. The course content was continuously reviewed and adapted as it was being piloted. The challenge of being housed in different institutions was addressed through weekly conference calls and regular site visits to UT by the UR faculty. All courses were team taught by UT-UR faculty and we created a Web-based/on-line presence through Blackboard (the course management system adopted by UT) for all project personnel to have access to the students and course content. Many excellent classroom activities were developed to support the teaching-learning process. These included extensive in-class and in-vivo observations and analyses, the use of supervision and response journals, invited guest lecturers on interpreter and deaf consumer perspectives, and the multicultural perspective. One of the highlights of the D-C application course was the final project that required students to teach the schema to groups of working interpreters.

In sum, this project has been both challenging and rewarding. The greatest challenges have been dealing with personnel constraints and programmatic constraints imposed by being a part of a flagship University and the realities of distance collaboration. Though we have had the benefit of frequent face to face exchanges, the majority of the communication between the collaborators has been by phone and through e-mail. The UT faculty cohort was successful in securing credit

toward the interpreting major for those students enrolled in all of the courses in the sequence except for the Medical Interpreting course, which counted as an elective.

It is the consensus of the UT faculty collaborators that the benefits to our baccalaureate interpreting program, our students, and to the field far outweigh the challenges. There has been outstanding synergy surrounding this project and we feel privileged to have piloted these courses. The UT faculty is convinced of the relevance and applicability of the D-C schema for interpreting work. Fortunately, our program is closely affiliated with the nationally recognized UT Center on Deafness which administers the Southeast Regional Interpreting Training Consortium (SERITC) and Postsecondary Education Programs Network (PEPNet) with affiliations with postsecondary institutions and educational programs from 14 states. Critical to the implementation of the curriculum developed by this project is continued "train the trainer" activities. Meanwhile, we look forward to *ongoing* training, evaluation and research regarding the D-C schema for interpreting work.²

D-C Schema Implementation Outside the UR-UT Project: An Overview

Robyn K. Dean and Robert Q Pollard, Jr.

University of Rochester Medical Center

The five course sequence implemented in UT's Educational Interpreting Program was the initial vehicle for the implementation of D-C schema in IPPs. However, as the UT courses were developed, implemented, and evaluated, it became apparent that while the structure of the FIPSE implementation project was workable at UT, it was likely to be less effective if disseminated "as is" to wider IPP audiences. As noted above, most IPPs have limited flexibility in their curricula. As we considered structural adaptations that would foster wider dissemination, we concluded that the primary effective components of the UT D-C schema courses could be distilled into four distinct "elements." These elements are: the D-C schema as a theoretical construct, the D-C schema as dialogic work analysis, the D-C schema as a learning tool, and the D-C schema as an assessment tool.

² The official UR-UT project final evaluation report will be published by the Institute for Assessment and Evaluation at UT by November, 2004. Those interested in receiving a copy of this report may contact Robyn Dean at UR.

D-C schema as theoretical construct. The four demand categories of the D-C schema (environmental, interpersonal, paralinguistic, and intrapersonal or EIPI) and the three opportunities to employ control options (pre-, during, and post-assignment) comprise the theoretical framework that we use for conceptualizing and understanding the work of an interpreter (Dean & Pollard, 2001; Dean & Pollard, in press). It is the foundation upon which the other three D-C schema elements noted above are built. Imparting this basic theoretical information to students is relatively straight-forward and could be a part of any foundation IPP course, such as Principles of Interpreting or Introduction to Interpreting. Students learn to apply the schema and become competent with its terminology and purpose through a series of exercises called situational analyses. Whether through the stimulus of a picture from a magazine, a television show segment, or from observation of some event, students employ the EIPI template to consider the demands presented by this hypothetical interpreting assignment. Students then consider what control options are available to the interpreter to respond to the given demands.

<u>D-C schema as dialogic work analysis</u>. Once a student understands this foundation material and how to effectively examine interpreting work through the D-C schema "lens," students then can begin to consider the *implications* of their proposed control options. The initial work of identifying demands and pairing them with potential control ideas creates a natural step to the subsequent task of *critiquing* interpreting work decisions. Students are asked to consider the positive and negative consequences that control decisions inherently create. The situational analyses tasks such as picture analysis and in-vivo observations can be expanded to include this new element of dialogic work analysis. This type of analysis fosters development of students' critical thinking and judgment skills, which is a vital part of all practice-profession education. Accordingly, the dialogic work analysis element of the D-C schema could be employed in ethics courses or practicum seminars as students discuss real work decisions, or even in IPP skills courses where students can discuss the implications of various translation decisions. (For further discussion of the utility of the D-C schema in framing ethical and work effectiveness decisions, see Dean and Pollard (in press)).

Note that the D-C theory and dialogic work analysis elements do not necessarily require new courses or an overhaul of the IPP curriculum. Understanding the nature of interpreting work, developing good practice judgment, and appreciating the complex nature of work ethics have always been objectives in IPP education. Employing the D-C schema as a theoretical construct and as dialogic work analysis affords IPP instructors and mentors a cohesive framework and a common terminology for understanding and analyzing interpreting work. As one of our colleagues at UT noted, "The demand-control schema has simply become the way we discuss the work of an interpreter" (IAE, 2003).

<u>D-C schema as a learning tool</u>. D-C schema as a learning tool is consistent with the growing movement in education away from didactic, teacher-driven classrooms and toward student-driven education. One such movement in medical education, problem-based learning (PBL), was developed in response to the critique that newly graduated physicians were lacking in their ability to interview and diagnose patients (interpersonal skills) and their ability to critically think through patient care and treatment decisions (judgment skills). In PBL approaches, medical students begin interacting with patients in their first year and learn medical information contextually, through active involvement in patient cases.

The main goal of the UR-UT project and the implementation of PBL-style observation-supervision courses in particular is to graduate students with good interpersonal and judgment skills in addition to a realistic understanding of the nature of interpreting work. Observation-supervision posits that, in light of the more holistic view of interpreting work emphasized by the D-C schema, learning about specialty content work (e.g., legal, medical, mental health) is optimized by being in those specific environments and understanding the goal of those environments, the characteristics and motivations of the people present, and the typical communication exchanges that occur in those settings. (See Dean, Pollard, and English, in this volume, and Dean and Pollard (in press) for more detailed discussion of the observation-supervision method.) Utilizing a D-C structured observation form, students come away from observations with a rich and realistic understanding of the demands present in the observed environment. Then, in supervision sessions with an interpreter teacher or mentor, observation material is used by the students and instructor to hypothesize work scenarios and potential

control ideas, including specific translation and behavioral decisions. Specialty content knowledge is also passed on through this contextualized work analysis discussion. The dialogic work analysis of critiquing controls in light of their consequences is an important element in supervision and, with repeated practice, students become increasingly sophisticated at "self-supervision" or the ability to critique their own work decisions.

Unlike the first two D-C schema elements (theory and dialogic work analysis), PBL-style courses and observation-supervision require significantly more teacher training and adaptation or augmentation of the curriculum. IPP instructors could add courses or redesign existing courses to feature PBL elements. Alternately, observation-supervision could be included in existing specialty content courses or practica. Observation-supervision also lends itself to skills courses where the communication exchanges that take place in observation settings are recorded and analyzed for potential interpretation and translation options. This approach helps students see how the specific elements of environmental and situational context impact translation decisions.

D-C schema as an assessment tool. Employing the above D-C schema elements in an IPP implies a desire to impart a new theoretical perspective about the nature of interpreting work, employ a new, theory-driven approach to the development of critical thinking and judgment skills, offer direct exposure to common or challenging interpreting work settings (but not via traditional observation of other interpreters and deaf consumers), and foster student appreciation for the profound impact that different settings and circumstances have on interpreting work. To be comprehensive in support of such goals, the D-C schema must offer a unique approach to student assessment. In other practice professions, practical exams assess a student's ability to synthesize and demonstrate new knowledge *along with and embedded within* a demonstration of their judgment skills. Practical exams assess not only students' abilities to recall import content information, but also their ability to critique and articulate potential work decisions. This type of exam could be given periodically throughout a course, at the end of relevant courses, or at the culmination of the student's education. Practical exams based on the D-C schema have been developed and employed in the UR-UT project and in UR's mental health interpreter training project (see Dean, Pollard, and English, this volume).

IPP instructors and mentors may employ the above D-C schema elements in a wide variety of ways. Approximately 15 IPPs other than UT are presently doing so. Each can offer their unique perspective on what implementation methods are most feasible, most desirable, and what the benefits, limitations, and drawbacks of various implementation options are. Below, five other IPP faculty or interpreter mentors offer information and insights into their experiences in implementing D-C schema elements into their teaching.

Amanda Smith, Johnson County Community College

My first exposure to the demand-control (D-C) schema was at the 2003 RID convention in Chicago. I was riveted by the possible implications for working interpreters, students, and mentees. In my capacity as Workshop Coordinator for the RSA7, I brought Robyn Dean and Robert Pollard out to Kansas City to provide in-depth training in the schema. The initial weekend was designed as an introduction to the D-C schema for working interpreters and students and the following two weekends were designed for those interested in implementing this work in teaching and mentorship. This is a fascinating schema and so crucial in the education of future interpreters.

After the first weekend of training, I added an assignment for my students in the Orientation to Interpreting course. They were required to go and observe communication. I provided them with parameters and guiding questions (not as extensive as the ones I later received from Robyn). The students seemed to benefit from this observation. It allowed them to see what communication looks like as a non-participant and how people interact with one another. I also conducted a picture analysis in class. This was beneficial for them because, even though they were only first semester students, they were able to identify areas of concentration and factors present in the scenario that may impact the work of an interpreter. I did not use the D-C schema terminology of "demands" and "controls." Instead I referred to the same elements as "factors" and "options." At that time, I was not formally trained in the D-C schema and therefore was not familiar or comfortable enough with the terminology. Now, I am much more comfortable using it.

I also utilized this schema in a mentoring relationship with a student who had taken a year off from the program. In this relationship, I utilized picture analysis primarily (pictures and scenarios provided by me as well as by the mentee). This also seemed to be very beneficial for this student. It allowed her to think of other aspects within interpreting than just linguistic aspects. Sometimes, our discussions did lead to linguistic topics: "How would you convey this concept to the consumer?" Mostly though, it allowed her to see the interpreting task as a whole and not just about sign-word relationships.

In my opinion, the D-C schema would be a welcome addition to any IPP - equipping faculty with tools, terms, and concepts for conveying all the non-linguistic requirements of our job. As a working interpreter, I love having the terminology and a "label" for the things I must consider (and have done in my work prior to receiving the D-C language to describe it) as well as having common terms to discuss and process with colleagues.

Jean Parmir, Ohio School for the Deaf

I first encountered the concept of the D-C schema by attending a workshop offered at my state RID conference. At that time, my primary duties were providing workshops for and consulting with educational interpreters. I found the information comforting when I thought about my own work as an interpreter. I did not explore it deeper; I was doing little interpreting and did not feel I understood it well enough to incorporate it in my workshops. Later, I was reintroduced to the D-C schema as a member of Cohort 2 of the TIEM Master Mentor Program (MMP). In the MMP, we considered our own interpretations and discussed the process. The impact the D-C schema had on us and on the way we were able to discuss our work with each other was powerful.

In my work as a mentor, I often have used the D-C schema both overtly, through explanations and by providing readings, and obliquely by asking questions that allow the mentee to explore the demands and controls she has experienced. As with my MMP classmates, mentees have found this approach to be a powerful way to look at their work in a way that is nonjudgmental, considers important factors, and brings to mind additional options for decision-making. The D-C schema fits with the mentoring approach in that the mentee has the knowledge (of the demands

and controls), the mentor is able to ask questions that guide rather than telling the mentee what to do, and the mentee develops a way of looking at the interpreting task that can continue to be valuable after the official mentoring relationship has ended. I know my work as a mentor would not be as effective without this tool.

Brian Morrison, Camden Community College

I was first introduced to Dean and Pollard's demand-control schema for interpreting work at the 2003 RID Conference in Chicago. Immediately, I was very fascinated by the theoretical construct as it seemed to make perfect sense as a way to look at interpreting work. As a fairly new teacher of interpreting, I was excited to bring this information to my students.

In the Fall of 2003, I taught a class called Interpreting Seminar. The course description was: "Students will be exposed to a variety of specialized interpreting situations, such as legal, deafblind, medical, mental health, rehabilitation, and educational environments. Students will have the opportunity to interact with working professional interpreters who have in-depth experience in the above-mentioned environments."

Since the class was designed as an observational class, I thought this would be a great opportunity to work with the D-C schema. Students so rarely are able to observe these kinds of situations; I thought I could "bring" these situations to the classroom. I contacted Robyn Dean and talked with her about how the D-C schema might apply in this type of course. She was absolutely great in sending me class materials and offering her help every step of the way.

Being new to the concept myself, I introduced the material to the class in small steps. With the picture analysis material provided by Robyn, we used pictures and scenarios to brainstorm demands from the four demand categories. After sufficient time and practice was spent on considering the demands, we brainstormed and discussed corresponding controls. After this inclass exercise, the time came for the students to complete a picture analysis assignment on their own. When they were completed, I faxed the completed assignments to Robyn who then critiqued them and was able to demonstrate to me what elements constitute a good D-C analysis.

Based on this new information, I graded a couple of the student's assignments myself and shared these with Robyn. She, in turn, critiqued my evaluations of the students' work.

Throughout this whole process, I saw the students become very interested in the D-C schema as well. I noticed that when we would discuss the schema in class and apply it to interpreting work, all of the students were active participants. Whereas in many classes, the students that are the "better signers" tend to do the majority of the talking but in using the D-C schema, all of the students participated on an equal level. It was also very nice to see the schema emerge in other courses as students discussed interpreting work using demand-control terminology.

I think using the D-C schema has not only benefited my students and my teaching, but in my own interpreting work as well. I am looking forward to expanding my knowledge about it and using it more in my work.

Leah Subak, Kent State University

The demand-control (D-C) schema, as it has been described by Dean and Pollard, has been extremely useful in explaining situations that may arise when working as an educational interpreter.

The decision to infuse the D-C schema into the curriculum at Kent State University (KSU) has led to a variety of changes listed/described below.

- 1. Deciding in which class to teach the fundamentals of the D-C schema
- 2. Deciding how to explain the D-C schema
- 3. Deciding how to bring all students in the program up to speed no matter what year of the program they are in
- 1. Since interpreters need to make interpreting/professional conduct decisions at all times while working, the D-C schema is able to be discussed in most interpreting-related classes in some respect. However, in-depth introduction seemed to fit best into the course that deals with ethical decisions or professional conduct.

- 2. Students are introduced to the D-C schema during their initial interpreting course at KSU and the schema is at least referenced in all subsequent interpreting-related courses. In the course which takes a deeper look at the D-C schema, students read several articles about it as well as instructor-generated material to aid them in their understanding of the schema. Students also are guided through picture analyses of various scenarios that may occur while interpreting. Journals are used to present scenarios and as a way to check student understanding of how to handle the scenarios applying the D-C schema. The following semester, a course that incorporates practicum hours is utilized to apply concepts of D-C while in the field. The ideal is to pair the D-C schema with a course which incorporates practicum hours as well.
- 3. When making the decision to start to incorporate D-C, students who were in various years in the program needed to be taught the information in the courses that a) seemed like a logical fit to introduce the material and b) were at a place that would allow the student to still utilize the material as best they could. With forethought and planning, incorporating the D-C schema has been accomplished at all levels of the program even though not all students learned it from one specific course.

The D-C schema is a useful tool that aids students in making decisions and works well when accompanied by guidance from a seasoned interpreter/practicum supervisor.

Stacey Storme, Johnson County Community College

The first time I attended a session on the D-C schema presented by Robyn Dean and Robert Pollard, I felt a flood of excitement and relief. Excitement for how the content fit so perfectly with the way I perceive the work of an interpreter as well as for the lively way the information was being presented. The relief I felt was in response to the anxiety I often feel as an interpreter educator. What I was hearing nailed the ever-present concerns that are constantly nagging at me about graduating interpreting students who are not sufficiently prepared to enter the workforce due to what I perceive to be a lacking curricula.

The D-C schema has the potential to provide educators with both a vital framework and a clear language with which to teach students about the practice profession of interpreting. After attending that first session, I quickly realized the schema is deceptively simple. Just because I "got it" so easily did not mean I was equipped to so quickly incorporate it into my teaching.

Since students do not have the hands-on experience of interpreting, this schema must be shared with them gradually and firmly in beginning courses and built upon in subsequent courses. While I was able to plant the seed in students by exposing them to pieces of the schema, I knew I needed more training to be able share it with students in a way that they would see it as a relevant tool rather that pure theory to memorize. I have since attended three 12-hour sessions on teaching the D-C schema taught by Robyn and Bob and am looking forward to infusing our curricula with this meaningful framework!

UR's Second FIPSE Proposal

Robyn K. Dean and Robert Q Pollard, Jr.

Given the success of the first FIPSE project and the remaining questions and challenges for curricular implementation, it is our intention to follow up this work with a dissemination project to begin in the summer of 2005. If our upcoming dissemination grant proposal is funded by FIPSE, the collaborative project will involve approximately fifteen IPPs and their faculty from across the country. Each IPP will consider the four D-C schema elements described above – D-C schema as a theoretical construct, as dialogic work analysis, as a learning tool, and as an assessment tool – and implement these elements within existing or, for some, newly created courses. In the first phase of the dissemination project, the expertise and diversity of the participating IPP faculty in creatively infusing these D-C schema elements into their existing teaching methods and curricular structures will yield data regarding varied and optimal implementation options and related curricular materials. In the second phase of the project, these recommendations and materials will be piloted by a second group of participating IPPs.

Those wishing to remain up to date on D-C schema teaching and research opportunities and progress are encouraged to visit the UR Deaf Wellness Center's website:

www.urmc.rochester.edu/dwc and join Robyn Dean's D-C schema teaching list serve by sending an e-mail message to: TeachingviaDCS-subscribe@yahoogroups.com.

References

Dean, R.K., Davis, J., Barnett, H. Graham, L.E., Hammond, L. Hinchey, K. (2003, January). Training medically qualified interpreters: new approaches, new applications, promising results. *VIEWS*, 20; 1, 10-12.

Dean, R. K. & Pollard, R. Q (in press). Consumers and service effectiveness in interpreting work: A practice profession perspective. In M. Marschark, R. Peterson, & E. Winston (Eds.), *Interpreting and interpreter education: Directions for research and practice*. New York: Oxford University Press.

Dean, R. K. & Pollard, R. Q (2001). Application of demand-control theory to sign language interpreting: Implications for stress and interpreter training. *Journal of Deaf Studies and Deaf Education*, 6(1), 1-14.

Institute for Assessment and Evaluation (2003). *Reforming interpreter education: A practice profession approach. University of Rochester -- University of Tennessee (FIPSE) grant project. Report #2*. Knoxville, TN: University of Tennessee.

Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, *24*, 285-307.

Author Notes

This work was supported by grant #P116B010927 from the U.S. Department of Education's Fund for the Improvement of Post-Secondary Education. However, the contents of this manuscript do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal government.

Robyn Dean and Robert Pollard wish to gratefully acknowledge the talent and dedication of numerous individuals at UT, without whom this FIPSE project would not have been possible or nearly as successful. The faculty of the Educational Interpreter Program, their administration, UT's Institute for Assessment and Evaluation, and the administration and staff of UT's Center on Deafness believed in this project from the very beginning and have contributed in enumerable ways to its successful outcome.

Correspondence regarding this article should be addressed to Robyn Dean, URMC Deaf Wellness Center, 300 Crittenden Blvd., Rochester, NY 14642 or via e-mail to Robyn_Dean@urmc.rochester.edu.