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Final Report: Model for Paraprofessional and Supervisor Training Designed to Meet the Needs of Students with Disabilities in General Education Settings

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Final Report:

Model for Paraprofessional and Supervisor Training Designed to Meet the Needs of Students with Disabilities in General Education Settings

(Grant Number: H325N980022)

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IDEAs
that Work

U.S. Office of Special
Education Programs

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Project Staff

The following individuals, listed in alphabetical order, served as project staff at some time during the project and for varying percentages of time (FTE).

Linda Backus, Ph.D., Research Assistant Professor

Chris CichoskiKelly, Web Support Staff

Eileen CichoskiKelly, Ph.D., Research Assistant Professor/Coordinator

Stephen Doll, Project and Web Support Person

Timothy Fox, M.Ed., Research Associate/Lecturer

Michael F. Giangreco, Ph.D., Research Professor/Director

Christina LeBeau, Project Support Person

Yannis Mavropoulos, Research Associate/Lecturer

The following individuals, listed in alphabetical order, are core faculty or staff at the *Center on Disability and Community Inclusion (CDCI)*, who at some time during the project contributed significantly to its successful operation.

Chigee Cloninger, *CDCI* Director

Michaella Collins, *CDCI* Dissemination Coordinator

Debra Kobus, *CDCI* Business/Financial Manager

Cindy Melvin, *CDCI* Support Staff

Suzanne Paquette, *CDCI* Office Manager

Executive Summary

This final report provides information about a project of national significance funded by the U.S. Department of Education, Office of Special Education Programs. The project titled, *Model for Paraprofessional and Supervisor Training Designed to Meet the Needs of Students with Disabilities in General Education Settings*, was awarded to the *Center on Disability and Community Inclusion (UCEDD)* at the University of Vermont.

The primary purpose of the project was to develop training materials that could be used to provide entry-level and more advanced training for paraeducators who assist in the delivery of special education in inclusive schools and classrooms. The project also developed training materials for teachers and special educators to assist them in directing the work of paraeducators. The materials were developed with an embedded "Blue Print" designed to facilitate replication after the funding period had ended. The materials were developed with sufficient specificity to be used by novice instructors, yet were flexible enough for use by experienced instructors and applied in a variety of formats (e.g., typical weekly course, intensive summer institute, interactive TV).

This report describes, the project's objective and their status along with 13 print products developed by the project and an internet learning center. The remainder of the report describes ongoing activities, continuing concerns, and assurance of distribution.

I. Introduction

The purpose of this project of national significance was to develop, implement and evaluate a model for training paraprofessionals to support students with disabilities within general education classrooms and those who direct and supervise their work (e.g., special educators, classroom teachers, administrators). The training materials that were developed included entry-level and more advanced content for paraprofessionals in important topical areas (e.g., challenging behaviors; low incidence disabilities) as well as training for supervisors of paraprofessionals. The training materials were designed for delivery in various formats: group instruction in various configurations (e.g., one 3-hr class per week for consecutive weeks; intensive summer institute, distributed across inservice days), Internet, and distance learning.

The original grant application asked for "blueprint" to ensure the opportunity for model replication. Rather than developing a separate "blue print" at the end of the project, we designed each set of training materials to be a "blue print" unto itself. We did this by creating materials with a high level of replicability such that novice instructors could utilize them. We assumed that more experienced instructors might not need that level of specificity (e.g., specific activities, scripted prompts in class); therefore each of the instructors' manuals included a page called "Make it Your Own" which encouraged people to individualize to meet local needs. The training materials have been distributed statewide through the *Vermont Department of Education* and

nationally through the *National Clearing House of Rehabilitation Training Materials (NCHRTM).*

The materials titled, *Paraeducator Entry-level Training for Supporting Students with Disabilities* includes six units that are designed to be taught during 18 hours of in-class instruction (3 hrs per unit) and includes 12 hours of practicum requirements. The six units are:

1. *Collaborative Teamwork*

2. *Inclusive Education*

3. *Family and Cultural Sensitivity Issues*

4. *Characteristics of Children with Various Disabilities*

5. *Roles and Responsibilities*

6. *Curriculum and Instruction*

For paraprofessionals who have completed entry-level training, more advanced content-area training includes two mini-courses, each consisting of four units (12 hours of in-class instruction and a 10 hour practicum). The mini-course materials titled, *Supporting Students with Challenging Behaviors: A Paraeducator Curriculum* include the following units:

1. *Understanding Student Behavior*

2. *Gathering Information About Challenging Behaviors*

3. *Preventing Challenging Behavior and Teaching Replacement Behaviors*

4. *Responding to Challenging Behaviors*

The mini-course materials titled, *Supporting Students with Severe Disabilities* include the following units:

1. *Principles and Assumptions*

2. *Augmentative and Alternative Communication*

3. *Health and Safety*

4. *Personal Care*

A set of materials titled, *Teacher Leadership: Working with Paraeducators*, is designed to assist teachers and special educators effectively direct the work of paraeducators. It consists of 12 hours of in-class instruction and a 10-hour practicum. The four units of this mini-course include:

1. *Welcoming, Acknowledging, and Orienting Paraeducators*

2. *Roles and Responsibilities of Paraeducators and Others*

3. *Planning for the Paraeducators*

4. *Communicating with Paraeducators and Providing Feedback*

The remainder of this report chronicles: (a) the project's objectives and their status, (b) project products, (c) ongoing activities, (d) continuing concerns, and (e) assurances of distribution.

II. Project Objectives and Status

This section lists the project objectives from the original grant application and provides a brief summary of the status of each one. Additional information pertaining to the objectives is found in subsequent sections of this report.

Objective 1: *To convene a national advisory council of appropriate stakeholders.*

Objective 2: *To collaborate with a Curriculum Design Team with national expertise to design paraprofessional and supervisor training curricula.*

Objective 3: *To field-test, evaluate and revise training curricula that can be replicated nationally at preservice and inservice levels.*

Objective 4: *To conduct a national validation of the training curricula.*

Objective 5: *To prepare and disseminate a "blueprint" for replication of the validated curricula.*

Status of Objectives 1-5:

At the outset of the project a national advisory council was convened. The group included individuals representing the following stakeholder groups: students with disabilities, adults with disabilities, parents who have children with disabilities, parent advocacy organizations, state department of education personnel, general education teachers, special educators, university faculty, assistive technology specialists, and paraprofessionals (some members represent more than one stakeholder group). A subset served as the *Curriculum Design Team* consultants. Group members resided in seven different states in diverse parts of the country.

All members were contacted by phone, email, and or mail to solicit their input on several occasions during the first two years of the project. Advisory council and design team members provided feedback on training content, questionnaire content (for national validation study), assistance with identification of appropriate questionnaire respondents, and general feedback about project related activities. The members residing in Vermont were invited to an Advisory Council meeting in May 1999. Input was solicited from all absent team members, including those from beyond Vermont's borders. Their

input was shared at the meeting. All Advisory Council and Curriculum Design Team members were also sent project products (e.g., "Shared Understanding..."), and information about the project website.

The role of the Advisory Council and Curriculum Design team was most prominent at the outset of the project to assist in setting the direction and getting initial feedback. That involvement lessened after the second year of the project when field-testing was in full swing because the initial partners had expertise regarding general paraprofessional issues, but did not necessarily have content knowledge (e.g., challenging behaviors, severe disabilities). To get feedback on those topics we relied primarily on a statewide network of university and field-based colleagues. We also brought in Dr. Bonnie Utley (University of Colorado, Denver) to assist in outlining the mini-course on supporting students with severe disabilities. At that point in time the original advisory council members they were primarily dissemination partners and field-test sites became the primary source of feedback.

An initial national validation of curriculum content areas (e.g., collaborative teamwork, inclusive education, managing students with challenging behaviors) was completed using a nationally distributed questionnaire. The findings, which included questionnaire responses from 153 individuals (e.g., special educators, administrators, parents, university faculty, paraprofessionals) from 36 different states, validated the importance and appropriateness of the curriculum content. The raw data (demographic and

content) from the questionnaire are posted on our project website at

http://www.uvm.edu/~cdci/paraprep/survey.html

The bulk of the project's resources went into developing, field-testing and revising the actual training materials. This resulted in the development of four sets of training manuals described in the introduction and further detailed in Section III (Project Products and Description of Training Materials); see Citations #2 - #10 for descriptions of manuals and Citation #11 for a formal field-testing summary. The materials are known to have been utilized in numerous additional locations around the country, though without formal field-test feedback due to insufficient project resources and reported level response burden by school personnel.

This development and formal field-testing tasks were larger and more complicated that originally envisioned. As a result, three other sets of training materials that were initially identified for development were not completed (i.e., literacy, implementing instruction, and assistive technology). After meeting with literacy specialists and beginning to outline a literacy mini-course for paraeducators, the Project Director came to the conclusion that we needed to make adjustments in the project. What paraprofessionals needed to learn about literacy was training on the school-specific and student-specific programs they were encountering; this could not be done effectively with a generic mini-course on literacy. Assistive technology presented the challenge of changes in technology outpacing the training materials or leaving them outdated too soon. In an effort to address the topic we included information

about augmentative communication devices and other assistive technology in the mini-course manual *Supporting Students with Severe Disabilities*. Basic content on implementing instruction is included in Unit 6 of the *Entry-Level* course materials for paraeducators. This topic clearly could have had a more detailed mini-course, but we simply ran out of time and resources. Also, because of limited resources and timing, only the *Entry-Level...* and *Challenging Behaviors* courses generated a sufficient amount of formal field-test data to report. The *Teacher Leadership...* mini-course was formally field-tested in four sites by four different instructors. But because of small numbers in each course, approximately seven teachers per class, and problems collecting data, there were insufficient data to report any generalized findings. More information regarding the training of teacher and special educators to support and supervise paraprofessionals is included in Section V of the report (Continuing Concerns). The last set of materials, *Supporting Students with Severe Disabilities*, was not finalized and distributed until the project was in a no-cost extension year. Although the materials are, and continue to be disseminated, there was neither time nor financial resources to formally field-test this last set of training materials.

As stated earlier, rather than developing a separate "Blue Print" to facilitate replication, we purposely embedded replication features within each of the training manuals. Additionally, a "Blue Print" pertaining to the field-testing of the *Entry-Level... course* via distance learning/interactive TV was developed (see Section III, Citation #13). Lastly, we developed a web-based

learning option called the *Paraeducator Resource and Learning Center (PRLC)* pertaining to content from the *Entry-Level...* course materials for paraeducators. It provides another replicable format since the source codes are available online.

III. Project Products & Description of Training Materials

The following is an annotated listing of thirteen products developed partially or completely with support of this grant. Products are listed in chronological order of development.

Citation #1:

Giangreco, M.F., CichoskiKelly, E., Backus, L., Edelman, S., Broer, S., CichoskiKelly, C., & Spinney, P. (1999, March). Developing a shared understanding: Paraeducator supports for students with disabilities in general education. *TASH Newsletter, 25*(1), 21-23.

Description: This national newsletter article presents the project's philosophical and practice underpinnings of the project, referred to in the article as a "shared understanding." The bulk of the article lists 28 indicators of paraeducator support divided into six categories: (1) Acknowledging Paraeducators, (2) Orienting and Training Paraeducators, (3) Hiring and Assigning Paraeducators, (4) Paraeducator Interactions with Students and Staff, (5) Roles and Responsibilities of Paraeducators, and (6) Supervision and Evaluation of Paraeducator Services.

Citation #2:

CichoskiKelly, E., Backus, L., Giangreco, M. F., & Sherman-Tucker, P. (2000). *Paraeducator entry-level training for supporting students with disabilities. (Instructor's Manual).* Stillwater, OK: National Clearinghouse of Rehabilitation Training Materials.

Description: This Instructor's Manual is designed to include materials for course instructors to complement the content information in the Participant's Manual (see Citation #3). The overall design of the material emphasizes the role of the paraeducator as a valued member of a collaborative team and practices that are family-centered and culturally sensitive in inclusive settings. The content focuses on the initial and most essential entry-level knowledge and skills necessary for paraeducators. It includes six, 3-hour units: (1) Collaborative Teamwork, (2) Inclusive Education, (3) Families and Cultural Sensitivity, (4) Characteristics of Children and Youth with Various Disabilities, (5) Roles and Responsibilities of Paraeducators and Other Team Members, (6) Paraeducators Implementing Teacher-Planned Instruction. It is based on a review of the literature, a national survey of training needs, input from national and field-based experts. It emphasizes the roles of paraeducators assisting in the implementation of instructional and non-instructional plans designed by qualified professionals. It establishes an expectation that paraeducators *not* be the "exclusive or primary instructors" for a student with disabilities. A variety of features are included to enhance replicability (e.g., unit overview, unit objectives, agendas, lesson plans, in-

class activities, overhead transparencies, practicum requirements, knowledge reviews [post-tests]). The Instructor Manual is available on a nonprofit, cost-recovery basis from *National Clearinghouse of Rehabilitation Materials (NCRTM)* at Oklahoma State University: $23.80 (Order No. 650.048A) and through the *Center on Disability and Community Inclusion* (UCEDD) at the University of Vermont.

Citation #3:

CichoskiKelly, E., Backus, L., Giangreco, M. F., & Sherman-Tucker, P. (2000). *Paraeducator entry-level training for supporting students with disabilities. (Participant's Manual).* Stillwater, OK: National Clearinghouse of Rehabilitation Training Materials.

Description: This is the Participant's (that is the companion for the Instructor's manual listed in Citation #2). In addition to an introduction and course practicum requirements, for each unit it includes: (a) a Participant overview, (b) required readings, (c) class activity worksheets and directions, (d) knowledge reviews (quiz), (e) Cooperating Teacher Practicum Summary, and (f) a unit evaluation form. The Participant Manual is available on a nonprofit, cost-recovery basis from *National Clearinghouse of Rehabilitation Materials (NCRTM)* at Oklahoma State University: $25.20 (Order No. 650.048B) and through the *Center on Disability and Community Inclusion* (UCEDD) at the University of Vermont.

Citation #4:

Backus, L. & CichoskiKelly, E. (2001). *Supporting students with challenging behaviors: A paraeducator curriculum. (Instructor's Manual).* Stillwater, OK: National Clearinghouse of Rehabilitation Training Materials.

Description: This Instructor's Manual is designed to include materials for course instructors to complement the content information in the Participant's Manual (see Citation #5). The overall design of the materials emphasizes the role of the paraeducator as a valued member of a collaborative team and practices that are family-centered and culturally sensitive in inclusive settings. The materials focus on knowledge and skills designed to follow entry-level training. Includes four, 3 hour units: (1) Understanding Student Behavior, (2) Gathering Information About Challenging Behaviors, (3) Preventing Challenging Behavior and Teaching Replacement Behaviors, (4) Responding to Challenging Behavior. It is based on a review of the literature, a national survey of training needs, input from national and field-based experts. It emphasizes the roles of paraeducators assisting in the implementation of positive behavior support plans designed by qualified professionals. A variety of features are included to enhance replicability (e.g., unit overview, unit objectives, agendas, lesson plans, in-class activities, overhead transparencies, practicum requirements, knowledge reviews [post-tests]). The Instructor Manual is available on a nonprofit, cost-recovery basis from *National Clearinghouse of Rehabilitation Materials (NCRTM)* at Oklahoma State

University: $20.00 (Order No. 650.050A) and through the *Center on Disability and Community Inclusion* (UCEDD) at the University of Vermont.

Citation #5:

Backus, L. & CichoskiKelly, E. (2001). *Supporting students with challenging behaviors: A paraeducator curriculum. (Participant's Manual).* Stillwater, OK: National Clearinghouse of Rehabilitation Training Materials.

Description: This is the Participant's (that is the companion for the Instructor's manual listed in Citation #4). In addition to an introduction and course practicum requirements, for each unit it includes: (a) a Participant overview, (b) required readings, (c) class activity worksheets and directions, (d) knowledge reviews (quiz), (e) Cooperating Teacher Practicum Summary, and (f) a unit evaluation form. The Participant Manual is available on a nonprofit, cost-recovery basis from *National Clearinghouse of Rehabilitation Materials (NCRTM)* at Oklahoma State University: $23.20 (Order No. 650.050B) and through the *Center on Disability and Community Inclusion* (UCEDD) at the University of Vermont.

Citation #6:

Giangreco, M. F. (2001). *Teacher leadership: Working with paraeducators. (Instructor's Manual).* Stillwater, OK: National Clearinghouse of Rehabilitation Training Materials.

This Instructor's Manual is designed to include materials for course instructors to complement the content information in the Participant's Manual (see Citation #7). The overall design of the materials emphasizes

the role teachers and special educators directing the work of paraeducators in inclusive settings. Focuses on knowledge and skills across four, 3 hour units: (1) Welcoming, Acknowledging, and Orienting Paraeducators; (2) Clarifying Roles and Responsibilities of Paraeducators and Other Team Members; (3) Planning for Paraeducators; and (4) Communicating with Paraeducators and Providing Feedback. It is based on a literature review and input from national and field-based experts. It emphasizes the roles of paraeducators assisting in the implementation of plans designed by qualified professionals. A variety of features are included to enhance replicability (e.g., unit overview, unit objectives, agendas, lesson plans, in-class activities, overhead transparencies, practicum requirements, knowledge reviews [post-tests]). The Instructor Manual is available on a nonprofit, cost-recovery basis from *National Clearinghouse of Rehabilitation Materials (NCRTM)* at Oklahoma State University: $13.40 (Order No. 650.049A) and through the *Center on Disability and Community Inclusion* (UCEDD) at the University of Vermont.

Citation #7:

Giangreco, M. F. (2001). *Teacher leadership: Working with paraeducators. (Participant's Manual).* Stillwater, OK: National Clearinghouse of Rehabilitation Training Materials.

Description: This is the Participant's (that is the companion for the Instructor's manual listed in Citation #6). In addition to an introduction and course practicum requirements, each unit it includes: (a) a participant

overview, (b) required readings, (c) class activity worksheets and directions, (d) knowledge reviews (quiz), (e) Cooperating Teacher Practicum Summary, and (f) a unit evaluation form. The Participant Manual is available on a nonprofit, cost-recovery basis from *National Clearinghouse of Rehabilitation Materials (NCRTM)* at Oklahoma State University: $21.20 (Order No. 650.049B) and through the *Center on Disability and Community Inclusion* (UCEDD) at the University of Vermont.

Citation #8:

Fox, T. (2001). Supporting Students with Severe Disabilities: A Paraeducator Curriculum (Instructor's Manual). Stillwater, OK: National Clearinghouse of Rehabilitation Training Materials.

Description: This Instructor's Manual is designed to include materials for course instructors to complement the content information in the Participant's Manual (see Citation #9). The overall design of the materials emphasizes the role of the paraeducator as a valued member of a collaborative team and practices that are family-centered and culturally sensitive in inclusive settings. The materials focus on knowledge and skills designed to follow entry-level training. Includes four, 3 hour units: (1) Principles and Assumptions, (2) Augmentative and Alternative Communication, (3) Health and Safety, and (4) Personal Care. It is based on a literature review, a national survey of training needs, and input from national and field-based experts. It emphasizes the roles of paraeducators assisting in the implementation of plans designed by qualified

professionals. A variety of features are included to enhance replicability (e.g., unit overview, unit objectives, agendas, lesson plans, in-class activities, overhead transparencies, practicum requirements, knowledge reviews [post-tests]). The Instructor Manual is available on a nonprofit, cost-recovery basis from *National Clearinghouse of Rehabilitation Materials (NCRTM)* at Oklahoma State University: $21.70 (Order No. 650.051A) and through the *Center on Disability and Community Inclusion* (UCEDD) at the University of Vermont.

Citation #9:

Fox, T. (2001). *Supporting Students with Severe Disabilities: A Paraeducator Curriculum (Participant's Manual).* Stillwater, OK: National Clearinghouse of Rehabilitation Training Materials.

Description: This is the Participant's (that is the companion for the Instructor's manual listed in Citation #8). In addition to an introduction and course practicum requirements, each unit it includes: (a) a participant overview, (b) required readings, (c) class activity worksheets and directions, (d) knowledge reviews (quiz), (e) Cooperating Teacher Practicum Summary, and (f) a unit evaluation form. The Participant Manual is available on a nonprofit, cost-recovery basis from *National Clearinghouse of Rehabilitation Materials (NCRTM)* at Oklahoma State University: $24.60 (Order No. 650.051B) and through the *Center on Disability and Community Inclusion* (UCEDD) at the University of Vermont.

Citation #10:

Giangreco, M.F. & Doyle, M.B. (2002). Students with disabilities and

paraprofessional supports: Benefits, balance, and band-aids. *Focus on*

Exceptional Children, 34 (7), 1-12.

Description: Following a review of current paraprofessional literature and

issues, this article addresses five contemporary questions that are within

the sphere of control of school personnel, either individually or collectively,

to improve paraprofessional supports for students with disabilities

1. To what extent should paraprofessionals be teaching students with

    disabilities?

2. What impact does the proximity of paraprofessionals have on students

    with disabilities?

3. How does the utilization of paraprofessional support effect teacher

    engagement and why should it matter?

4. How can authentic respect, appreciation, and acknowledgment of the

    important work of paraprofessionals be demonstrated?

5. What can be done to improve paraprofessional supports schoolwide?

For each question, pertinent information from the literature is offered as

well as implications for practice. In an interrelated fashion these five

questions address the benefits associated with well-conceived

paraprofessional supports and the balance of paraprofessional supports

with supports provided by others (e.g., classroom teachers, special

educators, related services providers, peers). This is set within a context

that challenges the reader to consider whether our existing or proposed

actions to improve paraprofessional supports offer viable solutions that truly accomplish what we intend for students with disabilities or whether they are merely band-aids.

Citation #11:

Giangreco, M.F., Backus, L., CichoskiKelly, E., Sherman, P., & Mavropoulos, Y. (2002). Paraeducator training materials to facilitate inclusive education: Initial field-test data. Burlington, VT: Center on Disability and Community Inclusion, University of Vermont. Manuscript submitted for publication review.

Description: This study presents initial field-test evaluation feedback on training materials designed to help prepare paraeducators to assist in the provision of special education in inclusive schools. Feedback was collected from 213 paraeducators who participated in the course, *Paraeducator Entry-Level Training for Supporting Students with Disabilities*, 105 who participated in the course, *Supporting Students with Challenging Behaviors: A Paraeducator Curriculum*, and the 23 instructors who taught a combined total of 20 sections of these courses in a variety of formats (e.g., face-to-face, interactive TV, intensive summer institute). Findings indicated that paraeducators gained new knowledge, perspectives, and skills that had direct application in their work. Both paraeducators and course instructors rated the materials favorably and provided feedback to improve them. Implications are offered for infusing paraeducator content into

school-based staff development as well as training programs for prospective special and general education teachers.

Citation #12:

Giangreco, M.F., & Doyle, M.B. (in press). Teacher leadership in directing the work of paraprofessionals. In C. Kennedy & E. Horn (Eds.), *Including students with significant disabilities: Putting research into practice.* Boston: Allyn & Bacon.

Description: This chapter begins by offering a brief overview explaining why it is important for educators to assume a leadership role to direct the work of paraprofessionals. Next, the majority of the chapter is devoted to describing four foundational aspects of directing the work of paraprofessionals: (a) welcoming and acknowledging the work of paraprofessionals, (b) orienting paraprofessionals to their roles in the school, classroom, and with assigned students; (c) planning for paraprofessionals, and (d) communicating with and providing feedback to paraprofessionals. Next, the chapter offers suggestions of where to look for online resources about paraprofessionals. The chapter concludes by considering criteria to determine whether your efforts to direct the work of paraprofessionals have been successful.

Citation #13:

Backus, L. (2002). *A blueprint for providing entry-level training to paraeducators via interactive television.* Burlington, VT: Center on Disability and Community Inclusion, University of Vermont.

Description: This article summarizes the process and procedures that were used to provide training to paraeducators in Vermont using Interactive Television and adapting the curriculum entitled *Paraeducator Entry-Level Training for Supporting Students with Disabilities* (CichoskiKelly, Backus, Giangreco & Sherman-Tucker, 2000). Specific adaptations to a traditional format were made in order to provide the training to paraeducators at three separate sites across the state. A description of the curriculum, objectives, students, procedures, findings and recommendations regarding using the Interactive Television format for training paraeducators are outlined.

IV. Ongoing Activities

Ongoing activities were designed to enhance the impact of the project beyond the funded period by ensuring wide distribution of materials as well as easy, cost-effective availability.

A.   Dissemination & Materials Availability

Information about the project has been disseminated through a variety of mechanisms such as project brochures, the project web site, links on related web sites, national email distributions, links with national advising partners, ongoing interactions with the *Vermont Paraeducator Task Force* and the

Vermont Department of Education, and presentations at several local, regional and national conferences (e.g., TASH, CEC, OSEP Project Directors, National Resource Center for Paraprofessionals). The project's products, especially the training manuals, have been disseminated widely through free distribution and continue to be distributed on a cost-recovery basis through the *National Clearing House of Rehabilitation Training Materials* and the *Center on Disability and Community Inclusion (UCEDD)*.

B.   Web site and web updates

The project's web site provides a variety of information and resources. In addition to basic project information, web site includes: (a) the "Shared Understanding ..." (Section III, Citation #1) to provide the philosophical underpinning of the project, (b) summaries of the project's training materials, (c) a listing of available Vermont instructors, (d) summaries of paraeducator training materials developed by other projects (e.g., MN, UT, NE), (e) links to a wide range of paraeducator web sites, and our *PRLC (Paraeducator Resource and Learning Center)*. See Appendix A for examples of the web site pages.

The web site is linked to the printed training materials in a couple of ways. First, like any print source, once printed, errors are found and new information becomes available. The inside cover of each of the four Instructor's manuals includes a computer icon and web URL that leads to *Updates* for the manuals and units. Corrected forms and new resources are listed here.

Secondly, the web site includes the *PRLC*. This was a larger than anticipated, yet worthwhile, product. For each of the *Entry-Level...* units (e.g.,

Collaborative Teamwork, Inclusive Education) the *PRLC* offers PowerPoint slide shows, learning activities, links to topically related web sites, and a *Knowledge Challenge*, which is an interactive, 10-question multiple choice quiz. When paraprofessionals log on to this part of the web site, they are presented with a question and an array of choices. Once they select what they think is the best answer and submit it online, they get an immediate response that indicates whether their answer was correct along with an explanation and links to related web sites. They can get a print out of their quiz that includes their answers, the site's responses, and a total score. See Appendix B for a complete example from Unit 2 (Inclusive Education).

Although we entertained thoughts of how this web-based option could be offered as a course, we ultimately decided not to offer it for course credit, but rather as a resource for individuals who are enrolled in a course and miss a class or those who don't have a course available to them because of timing (e.g., they were hired after a training was recently completed). Given the short-term nature of the grant, we did not have the capacity to monitor the site for course credit. Furthermore, our experiences suggested to us that face-to-face instructor-participant coursework was preferable as was the opportunity for paraprofessionals to meet together. Given that within a school or school system there typically are a sufficient number of paraprofessionals to warrant offering a face-to-face course and there are also a sufficient number of potential instructors (e.g., special educators, administrators), we felt that any distance

learning option was a second choice and that are web-based efforts would be better suited to serving as a support rather than a mainstay.

C.   Sustaining Efforts After the Grant Period

Though the funding for this grant has ended, we have enacted several approaches to sustaining its impact over time.

1.   The project staff continue to maintain and update the project's web site http://www.uvm.edu/~cdci/paraprep/ As part of his effort we are continually updating the list of available instructors, web links, and updating project information (e.g., manual corrections). The web site will remain up through the support of the *Center on Disability and Community Inclusion* the UCEDD of Vermont.

2.   The project staff are continuing to distribute all 10 project training manuals on a cost-recovery basis through two distributors: (1) the *National Clearing House of Rehabilitation Training Materials* at Oklahoma State University in Stillwater and (2) the *Center on Disability and Community Inclusion* at the University of Vermont in Burlington. Both of these mechanisms are self-sustaining and require no additional funds to maintain.

3.   The project staff maintains an active presence on the *Vermont Paraeducator Task Force*, a statewide consortium of organizations and individuals interested in paraprofessional issues in schools.

4. The project maintains a close link with a designated staff member from the *Vermont Department of Education* (currently Ann Lindner) to ensure that schools in the state know the project's products.

5. The project staff has worked closely with *Community College of Vermont (CCV)* so that courses for paraeducators are now "on the books" which are based on the training materials developed by the project. These courses are offered both at *CCV* sites as well as at school sites if requested.

6. A collaboration between the project, *CCV*, and the *Vermont State Colleges* has resulted in a 24-credit certificate program for paraprofessionals and the option for individuals to continue on an Associate's degree. This new program, led by Tim Sturm from *Lyndon State College*, relies on the project's *Entry-Level...* and *Challenging Behaviors...* training materials as the basis for the first two courses in the program which began just as the project was ending its no-cost extension year.

7. The materials used for the course,*Teacher Leadership: Working with Paraeducators*, has undergone curriculum review and approved as a one-credit "Continuing Education" course through the University of Vermont. It has been offered four times, all in off-campus sites in schools. This establishes an ongoing mechanism whereby any school in the state with a sufficient number of interested graduate students can offer this mini-course at their school for one graduate-credit

V. Continuing Concerns

The following subsections address some key issues that are not discussed elsewhere within existing project products (e.g., field-testing results, see Citation #11).

A.   Data Collection and Impact on Personnel & Students

Although this project produced a significant amount of training materials that are available nationally and field-tested some of them to ascertain their utility, the project also had limitations. The most significant limitation of this project was insufficient data of the impact of the training on personnel and ultimately on students with disabilities. This limitation has three main strands. First, the resources available to implement the grant were barely sufficient to produce the printed training materials, develop the web-based learning center, and offer multiple sections of the courses in a variety of formats. We made choices early on to develop as many materials as we could and collect consumer feedback information along the way, knowing that this was primarily a model development, rather than research, project.

Secondly, collecting data from participants continues to be an ongoing challenge. Even when participants are offered inducements such as free materials, free training, reduced tuition for credit, or schools are offered stipends to pay instructors involved in field-testing, it is challenging to get people to respond to data collection. School personnel faced with incredibly busy schedules are regularly hesitant to take time for data collection, even when it is built-in to field-testing (e.g., pretest/posttest; unit evaluations). As a project staff we faced a dilemma in some of our earliest field-testing because a

substantial proportion of paraeducators expressed major anxiety about taking pre and post quizzes. In fact, in one of the early cohorts, we lost nearly half of a class (about 10 people) because of they didn't want to be pre-tested.

Third, in circumstances when we can collect data on personnel and student impact we are challenged to think about it a way that effectively communicates the relationship between a training activity and student outcomes. The ripple effect that starts with training followed by the development of personnel knowledge and skills; this is followed by application with students and ultimately to impact on students. Adequately following this ripple, being able to attribute student outcomes to the ripple, and understanding the level of contribution to the student outcomes remains a challenging task and an important one. Logic modeling offers a good starting point to explore these issues.

B.   Challenges of Teacher Leadership Training

Before this project existed (in the early and mid 1990's), another faculty member here at the University of Vermont had operated a paraeducator training program for six years. It was a popular and highly regarded program that provided training to hundreds of paraeducators in Vermont. The fact that this earlier training project was not sustained after federal funding ended was a main impetus for developing the highly replicable materials and model that were the primary outcomes of this project. Part of the earlier project included the availability of training for teachers and special educators on supervising and directing the work of paraeducators. The coordinator of that project

informed me that over the course of six years no such training was ever offered because teachers and special educators did not sign up, despite having this training offered to them on an ongoing basis. We found it equally challenging to get teachers and special educators involved in training about paraeducators.

Despite offering $1,200 stipends to schools to pay for an instructor to teach the mini-course *Teacher Leadership: Working with Paraeducators*, the course was only offered in four schools and to very small groups, approximately seven teachers or special educators per class. Even the courses that were offered were done so only after multiple rescheduling because it was so difficult to get teachers and special educators to sign up. Anecdotal feedback from school personnel suggests two main reasons for this problem. First, many teachers and special educators do not believe they need training in this arena since they have been doing it as part of their job on an ongoing basis. Secondly, given the variety of training options available to teachers on content and pedagogy (e.g., literacy, differentiated instruction, standards-based curriculum and evaluation) and the limited time available for them to participate in training, many teachers consider training about working with paraeducators as a low priority option.

Interestingly, many of those teachers and special educators who did take the course, even those with many years of experience, reported that they learned and applied knew knowledge and skills with their paraeducators that benefited students. An interesting phenomenon occurred when some teachers used a self-assessment rubric, before and after the course, to consider their

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own status in reference to 12 indicators of their work with paraeducators (see Giangreco, 2001, p. 106-108, Citation #6). One might expect, even hope, that the self-assessment ratings would be higher after taking the class as a result of what was learned. To the contrary, in a number of cases scores went down after taking the course. Some teachers explained that their pre-course self-assessment was inflated because they didn't realize what they didn't know and weren't doing. The course helped them realize limitations in their own work with paraeducators, so when they self-assessed at the end of the course they were more critical in their ratings of themselves.

A potential solution to this problem is to make "directing the work of paraprofessionals" a teacher and special educator certification requirement. If this were accomplished, theoretically college and university teacher preparation programs would be compelled to address it in their preservice curriculum.

C. **Web-based and Distance Learning Options**

Although we are fortunate to have some resources to maintain our web site it is important to note that the initial costs associated with the development of the web site far exceeded our initial estimates, primarily in terms of personnel time and expertise. As we expanded into options beyond simple postings, such as online-interactive quizzes, the cost rose even more. Although we will do our best to update this site, the lack of funding for personnel to generate the content updates and technical personnel to do the actual web programming remains a challenge.

We continue to believe that web-based and distance learning options, though they have a place, are less preferable than face-to-face learning experiences. Many learning experiences that are effective in a group setting simply cannot be replicated on the web or even through interactive TV. Additionally, possibly the single most consistent message we heard from paraeducators was the importance and value of getting together with other paraeducators to learn together.

D.   Inadvertent Impact

Although we were strongly encouraged by the response of participants to the training experiences they encountered through this project, as the Project's Director I have an ongoing concern that expanded and improved training of paraeducators may inadvertently lead unintended impact. When confronted with the common problem that assigning paraeducators to students with disabilities relegates the least trained adults to supporting students with the most complex learning challenges, many schools jump to an obvious, though potentially limiting solution, "We need to train our paraeducators." Once trained, some schools feel more comfortable giving paraeducators ever-expanding instructional responsibilities "because now they are trained." This can exacerbate the very problems that existed before the training and prompted it to be offered.

To avoid this unintended impact we suggest that generic paraeducator training be coupled with training for teachers and special educators as well as school-specific (e.g., the school's reading program) and student-specific (e.g.,

IEP related) training. Furthermore, we suggest that training paraeducators be one among a number of options to strengthen educational opportunities and supports for students with disabilities. Strengthening paraeducator supports need not be the only option for school improvement. Efforts should be made to strengthen the capacity of general and special education teachers, improve their working conditions, consider resource reallocation, and explore natural supports. In this way, students with disabilities can have more instructional access to qualified teachers and special educators as well as peer without disabilities.

VII. Assurances Statement of Distribution

A copy of this Final Report is being sent to the ERIC Clearinghouse at the Council for Exceptional in Reston, VA. Additionally the report is being posted on our project web site and sent electronically to the National Resource Center for Paraprofessional in Education and Related Services and approximately 300 colleagues across the United States who are involved in teacher preparation and related endeavors.

Appendix A

Examples of Project Web Pages

www.uvm.edu/~cdci/paraprep/

Appendix B

Example of *Knowledge Review* Summary with Scoring and Computer-generated Responses