9-1-2015

Competencies in Training at the Graduate Student Level: Example of a Pediatric Psychology Seminar Course.

Carolyn E. Ievers-Landis
University Hospitals Case Medical Center, carolyn.landis@uhhospitals.org

Rebecca A. Hazen
University Hospitals Case Medical Center, Rainbow Babies & Children's Hospital; Case Western Reserve University, rebecca.hazen@uhhospitals.org

Karla K. Fehr
Southern Illinois University Carbondale, kfehr@siu.edu

Recommended Citation
Ievers-Landis, Carolyn E., Hazen, Rebecca A. and Fehr, Karla K. "Competencies in Training at the Graduate Student Level: Example of a Pediatric Psychology Seminar Course.." *Clinical Practice in Pediatric Psychology* 3, No. 3 (Sep 2015): 197-204. doi:10.1037/cpp0000104.

http://dx.doi.org/10.1037/cpp0000104
Ievers-Landis, C., Hazen, R., & Fehr, K. (2015). Competencies in training at the graduate student level: Example of a pediatric psychology seminar course. *Clinical Practice in Pediatric Psychology, 3*(3), 197-204.

Core Competencies in Training at the Graduate Student Level: Example of a Pediatric Psychology Seminar Course

Carolyn E. Ievers-Landis and Rebecca A. Hazen

University Hospitals Case Medical Center, Cleveland, Ohio

Karla K. Fehr

Southern Illinois University at Carbondale

Author Note

Carolyn E. Ievers-Landis, Division of Developmental and Behavioral Pediatrics & Psychology, Rainbow Babies & Children's Hospital, University Hospitals Case Medical Center; Rebecca A. Hazen, Division of Developmental and Behavioral Pediatrics & Psychology, Rainbow Babies & Children's Hospital, University Hospitals Case Medical Center; Karla K. Fehr, Department of Psychology, Southern Illinois University, Carbondale.

The course described in this paper was supported in part by a grant from the National Institute of Mental Health (5T32MH18830-24), granted to H. Gerry Taylor. The authors are grateful for Dennis Drotar's review of an earlier draft of this manuscript.

Correspondence concerning this article should be addressed to Carolyn E. Ievers-Landis, Division of Developmental and Behavioral Pediatrics & Psychology, Rainbow Babies & Children's Hospital, University Hospitals Case Medical Center, WO Walker Center, Suite 3150, 10524 Euclid Avenue, Cleveland, OH 44106-6038. Email: carolyn.landis@uhhospitals.org

Abstract

The recently developed competencies in pediatric psychology from the Society of Pediatric Psychology (SPP) Task Force on Competencies and Best Training Practices in Pediatric Psychology provide a benchmark to evaluate training program practices and student progress toward training in level-specific competency goals. Graduate-level training presents a unique challenge for addressing the breadth of competencies required in pediatric psychology while maintaining development of broader clinical psychology training goals. We describe a recurring graduate-level pediatric psychology seminar course that addresses training in a number of the competency cluster areas. The structure of the seminar, examples of classroom topics that correspond with a competency cluster areas as well as benchmarks used to evaluate each student's development in the competency area are provided. Specific challenges in developing and maintaining the seminar in this format are identified, and possible solutions are offered. This training format could serve as a model for established pediatric psychology programs to expand their didactic training goals or for programs without formal pediatric psychology training to address competencies outside of clinical placements.

Keywords: graduate education, pediatric psychology, training, core competencies, professional development

Given the increasing recognition of the value of core competencies and measurement of their attainment in pediatric psychology, attempts to establish competencies represent an important step for the further development of the field (Palermo et al., 2014). The competency cluster areas include cross-cutting knowledge, science, professionalism, interpersonal, application, education, and systems (Palermo et al., 2014). The goal of this article is to describe a recurring graduate-level pediatric psychology seminar course that addresses training in a number of the competency cluster areas to serve as a model for other clinical psychology programs. Steele and colleagues (2014) described the challenge of determining the best timing for the required training for specialization in pediatric psychology. This recurring seminar course allows for specialized training in pediatric psychology that optimally begins the first year of graduate school and continues every semester concurrent with broader clinical psychology training goals.

Graduate training in pediatric psychology has been a long-standing tradition within the APA-approved Clinical Psychology Ph.D. Training Program in the Department of Psychological Sciences at Case Western Reserve University. Dennis Drotar, Ph.D. initially established this training program and has published on a model of training that includes didactic coursework, clinical practicum in pediatric psychology, and research training (Drotar, 1998). Although the training model has remained largely unchanged, the current pediatric psychology seminar course instructors (first and second authors) have continued to tailor its content to encompass new developments in the field. In evaluating how well the course has targeted the competency cluster areas, we selected those with the best fit to be highlighted in the current paper: cross-cutting knowledge,

science, professionalism, and interpersonal. The current paper provides examples of course content, teaching strategies, and methods of assessing behavioral anchors associated with attainment of pediatric psychology core competencies for practicum and internship.

Overview of the Pediatric Psychology Seminar Course

As a part of graduate students' training, clinical coursework requirements are taken (e.g., psychopathology, research methods, statistics) as well as specific courses in child development, developmental psychopathology, and child and family interventions for those with a child focus. Students with particular interest in pediatric psychology enroll in the pediatric psychology seminar course, participate in clinical placements at local children's hospitals, and conduct pediatric psychology research. The course instructors and other pediatric psychologists with academic appointments at the university provide supervision and mentorship for a wide range of pediatric psychology-specific clinical and research experiences. Students obtain experiences in conducting evidence-based therapy, assessment, consultation, and multidisciplinary research in the pediatric setting. These experiences complement the students' learning in the course and provide a supplement to attaining the competencies.

The one-credit pediatric psychology seminar course is offered every semester with a different general theme (see Table 1). The course meets weekly for approximately two hours over a 15-week semester, and a grade is earned (i.e., this is not a pass/fail course). Graduate students specializing in pediatric psychology are generally expected to enroll each semester of their training, typically resulting in a total of 10 credit hours obtained over five years. Students with general child clinical interests have also enrolled,

and some choose to be continuously enrolled. The continuity of enrolling each semester allows students to gain training in the wide variety of areas that encompass pediatric psychology. The class is typically composed of 4-6 students with varying levels of training, allowing more advanced students to serve as models and mentors for their more junior peers.

Certain class components remain consistent each semester, including approximately seven theme-related lectures, at least one class discussion on professional development/ethics, and one statistics lecture (see Table 1 for examples from eight semesters). Typically four to six guest lectures are distributed among the various class component types. A minimum of three Writer's Workshops are scheduled each semester, allowing students to receive and give feedback to each other on research manuscripts and other academic writing projects in preparation. (See Drotar, 2000, for a thorough description of the Writer's Workshop concept, which is beyond the scope of this article.) Students are expected to distribute their writing at least four days prior to the Writer's Workshop, and the instructors and other students read each submission and make notes to share in class. During the class, each submission is discussed, with students and instructors taking turns giving feedback and debating critical issues. Semester assignments are varied and include such activities as required attendance at outside local talks and written/oral presentation assignments. These assignments are evaluated by formative assessments to monitor student learning of competencies and to provide feedback for addressing relative weaknesses and developing strengths and/or by summative assessments to more formally evaluate learning and guide activities in subsequent semesters. For both of these types of assessments, the individual student's

level of training is taken into account with the realization that a developmental progression takes place over the course of the clinical psychology program. Examples of semester themes, theme-related lectures, the distribution and content of class components, and semester assignments are provided in Table 1. Additional details are presented below regarding ways in which the most relevant competency cluster areas are taught and how attainment of competencies are evaluated.

Cross-Cutting Knowledge Competencies

In reviewing this core set of knowledge competencies (Palermo et al., 2014), we have determined that our course covers information related to the majority of these ten competencies with a variety of methods, including through theme-related lectures given by instructors or guest speakers or by students attending local talks, e.g., grand rounds. For example, for the cross-cutting knowledge competency related to understanding how other systems (e.g., state and federal policies) affect pediatric health and illness (1.7), one semester's theme focused on broadening paradigms of care with individual lectures on prevention, primary care, and public policy. An expert on advocacy for psychologists at the state and national levels provided a tutorial on advocacy and presented ways in which psychologists could become more involved. Another semester theme was based on students attaining knowledge of transition of pediatric care to adulthood (1.10) for a variety of chronic conditions. A guest speaker during this semester was a pulmonologist specializing in adults with cystic fibrosis who is part of an evolving process of transferring clinical care from pediatric to adult providers.

Assignments for evaluating development in this core set of competencies are varied and relate to the specific competency. As a specific example of evaluating

students' understanding of pediatric conditions and their impact on development (1.4), students were assigned to review the literature on key psychosocial factors/adherence issues for a selected condition, meet with a psychologist (assigned by the instructors) who had particular expertise in consultation with this particular condition, and then present this information to the class. This assignment was evaluated using formative assessment, providing feedback to each student via the instructors and other students asking questions for further elaboration and clarification following each presentation.

Science Competency

Another competency cluster area referenced in Palermo and colleagues' article (2014) that is very closely aligned with our course content is "science." This competency relates to research and evaluation methodology, ethical conduct of research in children, interdisciplinary research, and dissemination and knowledge transfer. Our course focuses on the science competency each semester by offering at least one class session on statistics (e.g., bootstrapping in structural equation modeling), at least one ethics lecture/discussion, and several Writer's Workshops during which students/instructors discusses methodology, data analysis, etc. as part of our critiques of manuscripts. There is overlap between many of the competency cluster areas, and an intention to address the science competency is woven into almost every aspect of this course.

Assignments that target the science competency are varied and have included those that allow for formative and summative assessments. Examples of formative assessments have included writing mentored journal article reviews and completing a manuscript to submit for review at a journal. These assignments were not graded but allowed instructors to evaluate multiple skill sets (e.g. presenting research in multiple

settings; understanding the role of literature searches) and further develop students' competencies through class discussions and written feedback. Summative assessments that were graded included preparing a letter of intent for a research grant proposal and giving an oral presentation. These assignments are consistent with the descriptions of behavioral anchors in the science competency cluster for readiness for practicum and internship. For example, for the readiness for internship behavioral anchor related to presenting "research effectively in professional forums," students were assigned to present a conference-style talk on a research project to the class. Instructors graded these presentations based on the quality of presentation style, content, and visual elements. Individual and group feedback was also provided with the goal of increasing students' competency in this area. In addition, completion of a letter of intent relates to the following readiness for internship behavioral anchor: "demonstrates understanding of basic components and aspects of writing grant applications."

Professionalism Competency

The domains within the competency for professionalism include professional values and attitudes; individual and cultural diversity; ethical, legal standards, and policy; and reflective practice/self-assessment/self care (Palermo et al., 2014). Each semester typically includes at least one class related to professional development/ethics regardless of the overall theme of the semester. Topics covered in this competency have included professional values and attitudes, individual and cultural diversity (e.g., social identity), ethical and legal standards (e.g., laws protecting patient confidentiality), and reflective practice/self-assessment/self-care (e.g., professional boundaries). Instructors encourage critical thinking related to ethics by leading discussions of professional/clinical/research-

related ethical dilemmas. These class topics address many of the behavioral anchors for this competency, including "becomes familiar with…ethical issues relating to clinical work in pediatric psychology" and "engages in self-reflection regarding attention to …attitudes and healthy behaviors and how those may affect clinical service." A frequent assignment across semesters has been to attend at least two local talks outside of the psychology department, which fits with the professionalism applied competency 3.4.A., "Utilizes ongoing education opportunities that are provided (e.g., seminars, lectures…) to gain greater knowledge regarding the professional practice of pediatric psychology, and the areas of medicine relevant to pediatric psychology" (Palermo et al., 2014).

Interpersonal Competency

The interpersonal competency cluster area includes both a communication domain (i.e., communicating with other professionals and systems) and relational domain (i.e., developing and supporting team approaches to care; dealing with challenges in collaboration). Examples of lecture topics related to this competency are collaborations with medical professionals with a focus on avoiding common pitfalls, alternative models of consultation, and team science. Guest speakers have included physicians from a variety of specialties (e.g., oncology, endocrinology, pulmonary, primary care, developmental/behavioral pediatrics), neuropsychologists, medical anthropologists, sociologists, and genetic epidemiologists, providing students with opportunities for broadening their conceptions of possible collaborators for pediatric psychologists and for recognizing similarities and differences in clinical care perspectives and research methodology. Because of the close proximity of Case Western Reserve University to Rainbow Babies & Children's Hospital, UH Case Medical Center, most guest speakers

need only to cross the street to join a class; however, guest speakers have been invited from other area institutions and to call in from other parts of the country to provide students with additional exposure via course-specific webinars. Behavioral anchors for assessing readiness for practicum and internship relate to these class topics (e.g., "understands the rationale for a team approach to care" and "recognizes a challenging clinical or professional relationship and understands strategies for addressing such relationships"). Assessment of the interpersonal competency is possible through formative assessments such as instructors' observations of students' interactions with guest speakers, identification of student strengths/weaknesses, and provision of individual and/or class feedback. More specifically, many physicians present case examples and ask for input on how to manage adherence or psychological difficulties, and students develop skills in offering recommendations in an effective manner. The instructors and more advanced students model appropriate communication strategies for providing consultation to professionals in other disciplines, and students' developing skills are evaluated by instructors so that individualized feedback may be given. Students also learn how to discuss research-related issues with professionals who have different theoretical orientations and methodological approaches. Other ways to teach and assess attainment of this competency are through the Writer's Workshops and mentored journal article reviews; both of these allow students to practice receiving/giving constructive criticism in a respectful yet direct manner. A scholarly literature exists that relates to this peer teaching and learning aspect of our course (e.g., see Secomb, 2008).

Challenges and Future Directions

This synopsis of our course highlights the great variety of semester themes, guest

lecturers, and approaches taken to address competencies in pediatric psychology. Doing this successfully each semester involves notable challenges. One is that the instructors must reinvent the course each semester to reflect the current state of pediatric psychology based upon information gained via the recent literature, professional conferences, research consortia, personal experience, etc. Another challenge is to take into account the make-up of the students who may be enrolling, including the level of their graduate training and whether or not they are specializing in pediatric psychology. A typical class includes first- and/or second-year students who are completing more general coursework in clinical psychology as well as more advanced students who may be preparing for internship. In comparison to more junior students, advanced students may already have a solid understanding of the most common chronic conditions. The instructors try to avoid repetition of the same topic (e.g., an entire class devoted to a general overview of type 1 diabetes) but make certain that a brief overview of a condition and its treatments is given prior to presentation of a more specific topic (e.g., family-based problem-solving interventions to improve adherence in type 1 diabetes). However, students have appreciated some review of previously presented material (e.g., professional development topics) because they likely gain different information at various time points based on their own level of competency and understanding. Another challenge based upon students' orientation is to balance general child clinical and pediatric psychology training. A course like this complements child clinical training, but general developmental and clinical skills must be developed by all students in regular coursework. Also, students' need to be informed about the research should be balanced with providing a more clinically oriented discussion. The instructors have tried to include case examples in

research lectures so that students better understand how research relates to clinical care, reinforcing the importance of the scientist-practitioner model. Finally, a significant challenge is to find guest speakers with the requisite expertise who are willing/able to attend class sessions. The coverage of the material may be limited by the instructors' expertise and availability of colleagues to assist with guest lectures, and creatively filling gaps through a webinar format may be necessary.

The exercise of comparing our on-going course to the core competencies demonstrates that the course content fits quite well with the majority of the competencies with the greatest coverage for those highlighted previously. Now that the competency benchmarks exist, evaluating student proficiency in these competencies, i.e., the assessment piece, could definitely be more standardized and applied with greater specificity. In the future, the assignments could also be tied clearly to one or more competency each semester, e.g., such as the assignment of writing a letter of intent for a research project on transition of care with the condition of the student's choice. This addresses the science and cross-cutting knowledge competencies. Furthermore, we believe that constructive feedback regarding student's proficiency with the interpersonal competency during interactions with guest lecturers and other students could be presented in a more structured way (e.g., by devising a rating system to quantify attainment of behavioral anchors related to these competencies). We believe that students earning a grade rather than offering a course such as this as pass/fail is preferable to encourage the highest level of performance for assignments and during class sessions.

Suggestions for Other Programs

The recurrent nature of this course may be unique because some clinical

psychology graduate programs offer one three-credit overview course in pediatric psychology with supplemental clinical/research experiences for more advanced students. For programs to increase continuity and duration of pediatric psychology training, restructuring their coursework to a similar format to our recurring one-credit seminar course may better meet didactic training goals. This format may not be possible for all clinical psychology programs due to many factors, such as availability of faculty to teach the course each semester. However, courses already offered as part of the current curriculum might be revised to achieve these goals. For instance, the third author is at an institution at which all child clinical students are enrolled continuously in an in-house practicum that includes a two-hour weekly group meeting with didactics and group supervision. Although all students do not have specific pediatric psychology goals, themes such as integrated behavioral health are increasingly applicable to all students' training. Thus, the seminar format described above has been adapted for this course by incorporating across-semester topics (e.g., ethics) and an overall semester theme that could be pediatrics focused (e.g., working on multidisciplinary teams) while still being applicable to students with more general child clinical training goals.

Conclusion

This course addresses a number of the competencies for the field of pediatric psychology with a flexible, comprehensive, interprofessional approach. These competencies are addressed using a variety of strategies with a different theme each semester covered via instructor lectures, guest speakers, the Writer's Workshop, outside presentations, and writing/oral presentation assignments. The ways in which the competencies have been addressed in this course (with details in Table 1) could serve as a

model to further develop and build upon for other courses in a variety of graduate-level clinical psychology programs with pediatric psychology training goals.

References

Drotar, D. (1998). Training students for careers in medical settings: A graduate program in pediatric psychology. *Professional Psychology: Research and Practice*, 29, 402-404.

Drotar, D. (2000). Training professional psychologists to write and publish: The utility of a writers' workshop seminar. *Professional Psychology: Research and Practice*, 31(4), 453-457.

Palermo, T., Janicke, D., McQuaid, E., Mullins, L., Robins, P., & Wu, Y. (2014). Recommendations for training in pediatric psychology: Defining core competencies across training levels. *Journal of Pediatric Psychology, 39*(9), 965-684.

Secomb, J. (2008). A systematic review of peer teaching and learning in clinical education. *Journal of Clinical Nursing, 17*, 703-716.

Steele, R., Borner, K., & Roberts, M. (2014). Commentary: Finding the middle bowl: Goldilocks' lessons on professional competencies in pediatric psychology. *Journal of Pediatric Psychology, 39*(9), 988-997.

Class Components	Table 1: Examples[a] from the Pediatric Psychology Graduate Seminar Class - Semester Themes							
	Psychosocial Adjustment to Chronic Health Conditions	**Psychosocial Adjustment to Chronic Health Conditions**	**Broadening Paradigms of Care: Prevention, Primary Care, and Public Health**	**Inpatient Pediatric Consultation**	**Evidence-Based Treatment for Pediatric Medical Conditions**	**Novel Measures/ Methods for Application in Pediatric Psychology**	**Trans-disciplinary Research and Pediatric Psychology**	**Designing Interventions for Pediatric Chronic Medical Conditions**
Theme-Related Lectures[b] The number of these class sessions is approximately seven per semester, but this varies depending upon other session content (e.g., number of Writers' Workshops, Professional Development/ Ethics, and Statistics classes)	-Sleep and autism -Behavioral treatment of feeding disorders -Transition of care and cystic fibrosis (M.D.) -Medication management for attention disorders (M.D.) -Type 2 diabetes (M.D.) -Poly cystic ovarian syndrome (PCOS) (M.D.)	-Binge eating and poly cystic ovarian syndrome -Pediatric burn injuries (Ph.D.) -Hypnotic language and pain (Ph.D.) -Low birth weight (Ph.D.) -Primary care (Ph.D.) -Cerebral palsy -Arthritis (M.D.) -Velo-cardiofacial Syndrome (Ph.D.) -Brain tumors (M.D.)	-Introduction: Broadening paradigms of care -Sickle cell disease (Ph.D.) -Changes in healthcare and the role of psychologists –Public policy and advocacy (Psy.D.) - Child Health Policy (M.P.H) -Psychologists in primary care (Ph.D.)	-Building collaborations in medical settings (Ph.D.) -Injury prevention (Ph.D.) -Painful medical procedures -Models of pediatric consultation (Ph.D.) -Irritable bowel disease (Ph.D.) - Pediatric Oncology (Ph.D.)	-Conversion disorder and other issues in pediatric consultation (Ph.D.) -Suicide assessments and inpatient precautions -Feeding interventions for cystic fibrosis -Pain management for procedures -Death and dying -Biofeedback and hypnosis (Psy.D.) -Treatment of toileting problems (Ph.D.)	-Cognitive-behavioral therapy for insomnia -Mental health screening in outpatient hospital-based clinics -Methods of adherence monitoring (Ph.D.) -Daily phone diaries (Ph.D.) -PDA's for collecting research data (Ph.D.) Observational methods – videotaped mealtime coding -Models for evaluating the built environment (Ph.D.)	-Conducting online surveys and dietary recalls -Different models of research of multiple disciplines -Experiences in conducting trans-disciplinary research (Ph.D.) -Team science -Research collaboration with colleagues in medical anthropology (Ph.D.) -Research and clinical work in a multi-disciplinary setting (Ph.D.)	-Intervention Research I -Research collaboration with colleagues in genetic epidemiology (Ph.D.) -Healthy Kids/Healthy Weight program -Evaluating fidelity in intervention research (Ph.D.) -Intervention research – Lessons from the field (Ph.D.) -Intervention Research II

Professional Development/ Ethics At least one class session per semester	Writing research grants	Preparing your curriculum vitae (CV)	Ethical issues in pediatric psychology research	Media relations	Reviewing manuscripts for professional journals	Applying for jobs in pediatric psychology	Authorship and writing (Ph.D.)	Ethical responsibilities of principal investigators and research ethics
Statistics At least one class session per semester	Structural equation modeling (Ph.D.)	Bootstrapping in structural equation modeling (Ph.D.)	Structural equation modeling – bootstrapping for small samples (Ph.D.)	Mediation and moderation	Analytic techniques for clustering of family-level data (M.D.)	Qualitative analyses in pediatric psychology research (M.D.)	Proper application of factor analysis	Longitudinal analyses
Writers' Workshops At least three spaced out through the semester with more scheduled depending upon the class size and seniority of students; some workshops are specific to the semester theme, e.g., on a research grant proposal or letter of intent								
Semester Assignments All include class participation & Writers' Workshop; others vary depending on the semester theme.	-Research plan for National Research Service Award training grant	-Prepare (CV) for review	-Letter of Intent for research grant proposal focused on prevention, primary care, or public policy	-Mentored review -Presentation (15 min) on conducting a consult addressing identified topic	-Mentored review -10-page paper on treatment for specific medical condition	-Submit one discussion question per reading -Attend two outside lectures	Submit one discussion question per reading -Attend two outside lectures	-15-minute presentation on student's current research -Final draft of manuscript by end of semester

[a]This table presents sample classes for actual semester themes but there may be some variation in course content from the syllabus for purposes of ease of presentation. [b]Theme-related and other lectures are instructor-led unless otherwise noted by the guest lecturer's professional degree (e.g., M.D., Ph.D., Psy.D.).