

**Academic Quality and Student Success Committee
Agenda**

1. **Call to Order/Roll/Declaration of a Quorum** (noon) *Chair Brown*

2. **Action Items**
 - 2.1 **Request to Recommend the HECC Approve the New Program: Masters in Applied Behavior Analysis, and Authorize Staff to Forward the Proposed Program to the Provost’s Council**
Interim Provost/Dean Maupin and MariaLynn Kessler, Humanities & Social Sciences Professor

3. **Adjournment** (1:30pm)

ACTION

Agenda Item No. 2.1

Request to Recommend the HECC Approve the New Program: Masters in Applied Behavior Analysis, and Authorize Staff to Forward the Proposed Program to the Provost's Council

Background

Staff proposed a new academic program: Masters of Science in Applied Behavior Analysis. The purpose of this degree program is to develop competent behavior analysts who are prepared to work across all areas of application in the field. This degree builds upon the Oregon Tech Graduate Certificate in Applied Behavior Analysis. In addition, an Oregon Talent Council grant was awarded to Oregon Tech in 2016 to develop a statewide supervision network to meet the need for approved supervised experience.

The Academic Quality and Student Success Committee met on February 23, 2017 and discussed the proposal in the public meeting. The Committee moved to request the full Board authorize the committee to hold a special meeting to further discuss the proposal and delegate approval to the Committee. Additional time was requested to review the full proposal packet.

The full Board held a public meeting on February 23, 2017 and pulled the item from the consent agenda for further discussion at the February 24, 2017 meeting. On February 24 the full Board delegated the responsibility to the AQSS Committee to review the proposed MS in Applied Behavior Analysis degree program and granted the Committee the ability to submit the proposal to the Provost's Council to request input if needed, and to submit the proposal to the HECC to move the degree forward, if warranted.

Recommendation

Staff recommends the Committee recommend the HECC approve a new program: Masters in Applied Behavior Science and authorize staff to forward the proposal to the Provost's Council.

Attachments

- Program Proposal
- Report Summary External Review
- External Review Response
- Budget Outline Form
- Appendix A – Faculty Curriculum Vitae
- Appendix B – Library Collection Review
- Appendix C – US Behavior Analyst Workforce
- Appendix D – 2014 US Professional Employment Survey

- Appendix E – Article on Applied Behavior Analysis
- Appendix F – Oregon Employment Department Grant Agreement
- Appendix G – Behavior Analysis Accreditation Board Worksheet and Behavior Analyst Certification Board Verification Form



Proposal for a New Academic Program

Institution: Oregon Institute of Technology

College/School: College of Health, Arts, and Sciences

Department/Program Name: Humanities and Social Sciences/Applied Behavior Analysis

Degree and Program Title: Master of Science in Applied Behavior Analysis

1. Program Description

- a. Proposed Classification of Instructional Programs (CIP) number.

42.2814 Applied Behavior Analysis

Applied Behavior Analysis. A program that focuses on the application of principles of learning and behavior to enhance the development, abilities, and choices of children and adults; and that prepares individuals to address the behavioral needs of individuals, especially those with developmental disabilities and autism. Includes instruction in behavior analysis and learning, behavioral and functional assessment, developmental psychology, applied behavioral analysis in developmental disabilities and autism, applied behavioral analysis in mental health and aging, research methods, evaluation of interventions, and professional and ethical issues. (<http://nces.ed.gov/ipeds/cipcode/cipdetail.aspx?y=55&cipid=89289>)

- b. Brief overview (1-2 paragraphs) of the proposed program, including its disciplinary foundations and connections; program objectives; programmatic focus; degree, certificate, minor, and concentrations offered.

Degree offered

The Master of Science in Applied Behavior Analysis (MS-ABA).

Programmatic focus

The focus of the MS-ABA program is on the development of competence in and the application of the concepts, principles and methods of behavior analysis across all areas of application. Graduates of the program will meet the requirements for national certification and Oregon licensure as behavior analysts and will be prepared to provide behavior analytic services for individuals and organizations in a wide variety of settings.

Disciplinary Foundation: Applied Behavior Analysis

Applied Behavior Analysis (ABA) is a professional discipline that has its foundation in psychology and the experimental analysis of behavior. ABA emerged as a distinct discipline in the late 1960's and emphasized understanding the effects of environmental factors on observable behavior. Applied Behavior Analysis stresses direct measurement of behavior, understanding the causes of behavior, manipulating environmental variables to produce

socially significant effects, and evaluation of outcomes. ABA is an evidence-based, data-driven, systematic approach to intervention. Practitioners of ABA rely on direct observation of behavior, functional analysis, and interventions that involve environmental manipulations (including training methods, situational factors, and motivational factors with an emphasis on contingencies of reinforcement) to produce changes in behavior that improve the quality of life for individuals.

The principles and methods of ABA are applied successfully across a wide variety of settings and populations. Settings where behavior analysts provide services include homes, clinics, rehabilitation settings, residential facilities, social service agencies, mental health facilities, schools, and in business and industry. Some of the areas in which ABA is used include child abuse and neglect, behavioral medicine, gerontology, sports, education, performance management, autism, developmental and intellectual disabilities, brain injury, and organizational behavior management. Behavior analysts work with organizations, businesses, and industry applying principles of behavior analysis to improve workplace performance.

Program Mission

The mission of the MS-ABA program is to enable students to become effective and ethical behavior analysts. Students will be prepared to apply principles of behavior analysis to enhance the lives of individuals across a wide variety of settings. The program emphasizes a foundation in theory, concepts, and principles, development of basic behavior analytic skills, and an emphasis on professional and ethical responsibilities.

Program Objectives

1. To produce competent graduates who can work effectively and ethically across settings and with diverse populations
 2. To enable students to obtain the knowledge and skills necessary for immediate employment in ABA and/or further graduate study in ABA and related areas
 3. To prepare students for national certification and Oregon licensure as behavior analysts
- c. Course of study – proposed curriculum, including course numbers, titles, and credit hours.

The proposed curriculum for the MS-ABA has been developed to meet the coursework requirements for national certification in behavior analysis and licensure in Oregon as established by the Behavior Analysts Certification Board, Inc. (BACB) and the Oregon Behavior Analysis Regulatory Board (BARB). The curriculum has been designed to align with the standards established by the Behavior Analysis Accreditation Board (BAAB). The proposed coursework will allow students to meet the coursework and experience requirements for national certification and provides students with the foundation for continued professional growth. (See Appendix G)

The following proposed curriculum is designed for a student attending full-time. It is understood that some students may choose to attend the program on a part-time basis, which would decrease the number of credits taken per term, and increase the number of terms to earn the degree. Given the intensity of the coursework and the 62 credits required

for the degree, it is expected that students taking 9 credits per term will finish the degree in seven terms, i.e., two years.

Curriculum Map

<u>Course # & Title</u>	<u>Credits</u>
<u>First Year</u>	<u>(35)</u>
<u>Fall Term</u>	<u>(10)</u>
ABA 511: Foundations of ABA I**	3
ABA 521: Ethics and Professionalism I**	3
ABA 515: Basic Behavior Analysis	3
ABA 501: ABA Colloquium	1
<u>Winter Term</u>	<u>(10)</u>
ABA 512: Foundations of ABA II**	3
ABA 526: Behavioral Assessment**	3
ABA 527: Radical Behaviorism	3
ABA 501: ABA Colloquium	1
<u>Spring Term</u>	<u>(10)</u>
ABA 525: Research Methods in ABA**	3
ABA 531: Behavior Change I**	3
ABA 516: ABA and Human Development	3
ABA 501: Colloquium	1
<u>Summer Term</u>	<u>(5)</u>
ABA 598: Intensive Practicum	2
ABA 535: Special Topics**	3
<u>Second Year</u>	<u>(27/28)</u>
<u>Fall Term</u>	<u>(9)</u>
ABA 522: Ethics and Professionalism II**	3
ABA 532: Behavior Change II**	3
ABA 598: Intensive Practicum	2
ABA 599: Thesis	1
<u>Winter Term</u>	<u>(9)</u>
ABA 598: Intensive Practicum	2
ABA 599: Thesis	1
ABA 536: Behavior, Physiology, and Pharmacology	3

ABA elective	3
<u>Spring Term</u>	<u>(9/10)</u>
ABA 598: Intensive Practicum or elective	2/3
ABA 599: Thesis	1
<u>ABA electives</u>	<u>6</u>
Total credits	62/63

*Practicum Fee of \$xx (professional liability coverage)

** BCBA course sequence

ABA electives

ABA 565: Organizational Behavior Management

ABA 566: ABA in Education

ABA 567: ABA and Health

ABA 575: Community Behavioral Analysis

ABA: 576: Clinical Behavior Analysis

ABA 577: ABA and Special Populations

- d. Manner in which the program will be delivered, including program location (if offered outside of the main campus), course scheduling, and the use of technology (for both on-campus and off-campus delivery).

The program is designed to allow for delivery on all Oregon Tech campuses, and to students in remote locations throughout Oregon. The MS-ABA will use Zoom, a synchronous videoconferencing program, to deliver courses to students in remote locations. Oregon Tech's Graduate Certificate in ABA (GC-ABA) and Masters in Education-Applied Behavior Analysis and Autism Spectrum Disorders (MEd-ABA/ASD) joint program with Southern Oregon University (SOU) currently use Zoom. The MS-ABA will continue to use this video-conferencing technology to allow students throughout Oregon to attend all MS-ABA classes. The video-conferencing technology will be used for the group supervision component of the supervised practicum. Using the synchronous video-conferencing technology provides students with the immediate interaction of a traditional face-to-face course, while providing access from anywhere.

We plan to offer classes at a variety of times throughout the day and evening, as room availability and scheduling permit. It is expected that most courses will meet in the evenings to accommodate practicum placements.

- e. Adequacy and quality of faculty delivering the program.

The Humanities and Social Sciences (HSS) department currently has two full-time and three ABA dedicated adjunct faculty teaching in the BS in Applied Psychology and Graduate

Certificate in ABA programs. These faculty are highly qualified in ABA and will contribute to the MS-ABA program. However, the increased workload associated with the MS-ABA program will require the addition of two FTE faculty positions in order to ensure programmatic quality. We will seek faculty with appropriate credentials and qualifications to fill these positions.

- f. Adequacy of faculty resources – full-time, part-time, adjunct.

Implementation of the MS-ABA will require hiring two FTE faculty in addition to the current full-time and part-time faculty teaching in the Graduate Certificate program.

The following faculty (vitae attached, Appendix A) would have roles in offering courses within the proposed program. Other faculty, adjunct and part-time, from the behavior analysis community would be used for specific courses as needed.

Full-time Faculty

Maria Lynn Kessler, PhD – Professor, Applied Psychology. Dr. Kessler has a PhD in Psychology with an emphasis in Applied Behavior Analysis. She has been teaching at Oregon Tech since 2003 and has served as the Applied Psychology program director from 2006-2011 and as the Applied Psychology Wilsonville Program Director since 2014. Dr. Kessler serves as the BACB® Approved Course Sequence Coordinator.

John Borgen, PsyD, BCBA-D™, Assistant Professor, Humanities and Social Sciences. Dr. Borgen has expertise in teaching and practicing Applied Behavior Analysis and is a Board Certified Behavior Analyst-Doctoral™.

Adjunct Faculty

Alice Keyl Austin, PhD, BCBA-D™, LBA. Dr. Austin has a PhD in Disability Disciplines with a specialization in Applied Behavior Analysis and is a Board Certified Behavior Analyst-Doctoral™. Dr. Austin has extensive experience providing behavioral services. Dr. Austin is the current President of the Oregon Association for Behavior Analysis and former member of the Oregon Behavior Analysis Regulatory Board.

Melissa J. Gard, PhD, BCBA-D™, LBA. Dr. Gard has a PhD in Applied Behavioral Science and is a Board Certified Behavior Analyst-Doctoral™. She has extensive experience providing behavioral services. Dr. Gard is a former President of the Oregon Association for Behavior Analysis.

Jenny White, MA, BCBA, LBA. Ms. White has a master's degree in special education and is a Board Certified Behavior Analyst and an Oregon Licensed Behavior Analyst. She has extensive experience in special education and providing ABA in clinic and home settings.

Required Positions

Program Director

This position would be responsible for preparing all necessary policies and procedures for offering the MS-ABA program and for admitting students into the program, overseeing the ongoing administration of the program, and contributing to

teaching as appropriate. The position will require release time for administrative responsibilities.

Practicum Coordinator

Responsibilities include developing relationships with qualified practicum and internship sites, maintaining oversight of the students and their experiences at these sites, and teaching supervised practicum course. Qualifications for this position would be BCBA or BCBA-D. This would be a 12-month position in order to ensure ongoing support for practicum in the summer. Note: Oregon Tech has received funding from the Oregon Talent Council that will support an ABA practicum coordinator position through June 30, 2017. It is anticipated that this position will continue beyond the grant funding period in order to continue to provide supervised practicum for students enrolled in the GC-ABA and MEd in ABA & ASD programs. Therefore, this may be a continuing, rather than new position.

Assistant Professor

Primary responsibilities would be offering the required courses in the MS-ABA program. Qualifications for this position would be doctorate in ABA or related and BCBA.

New Positions

The department currently has two full-time faculty with expertise in ABA. These faculty serve both the undergraduate BPSY and GC-ABA programs. The additional workload demands of the MS-ABA, will require additional faculty. We anticipate enrolling 15 new students per year in the MS program.

New Faculty hires in 2016/17

New Positions

Practicum Coordinator, PhD in ABA, BCBA – 12-month position

Assistant Professor, PhD in ABA, BCBA – 9-month position

g. Other staff.

It is anticipated that the program will not require additional support staff beyond those currently available to the BPSY and GC-ABA programs.

h. Adequacy of facilities, library, and other resources.

Library

The Oregon Tech Library's Collection Review for the MS-ABA program is attached in Appendix B. The library's current ABA-related holdings are sufficient to support the current undergraduate and graduate ABA programs. With some limited additional resources, the library would be able to meet the additional needs of the MS-ABA. The current holdings include access to electronic article and book databases as well as electronic subscriptions to several relevant journals. The MS-ABA program would benefit from subscriptions to several additional journals at an estimated annual cost of \$3,104.00. In order to ensure that ABA-related resources remain available, a \$4,500 annual budget allowance for the library is requested.

Facilities and other resources

The following resources are currently utilized by the GC-ABA and BPSY programs and would be utilized by the proposed MS program.

Classrooms – depending on scheduling, we would anticipate needing up to three small lecture classrooms with computer, webcam, microphone, and projector equipment; we will use the classrooms currently available

Computers for student use – available in Student Success Center, Library, and Computer labs

Videoconferencing service – the GC-ABA program currently uses Zoom to allow students at remote locations to attend class, we will continue to use Zoom for classes in the MS-ABA; we will need to add a subscription for the HIPAA compliant version of Zoom for use with the supervised practicum (\$199/month).

The program does not require any additional facilities, equipment, or technology, beyond what would normally be provided for new faculty. We will need to provide additional office space and equipment (including computers and phones) for two new faculty members.

- i. Anticipated start date.
Fall 2017

2. Relationship to Mission and Goals

- a. Manner in which the proposed program supports the institution’s mission, signature areas of focus, and strategic priorities.

Oregon Tech Mission

Oregon Institute of Technology, an Oregon public university, offers innovative and rigorous applied degree programs in the areas of engineering, engineering technologies, health technologies, management, and the arts and sciences. To foster student and graduate success, the university provides an intimate, hands-on learning environment, focusing on application of theory to practice. Oregon Tech offers statewide educational opportunities for the emerging needs of Oregonians and provides information and technical expertise to state, national and international constituents.

The MS in Applied Behavior Analysis clearly supports Oregon Tech’s mission to provide rigorous, high quality applied degree programs designed to meet accreditation standards, focus on the application of theory to practice, and offer statewide educational opportunities for emerging needs.

Applied Degree Program: Applied Behavior Analysis is an applied field and the courses provide a strong foundation in theory with a focus on application to practice. The MS-ABA curriculum emphasizes a strong theoretical foundation and hands-on application through supervised practicum and thesis requirements.

Rigorous, High Quality Program: The MS-ABA curriculum includes the nine-course sequence that has been evaluated and approved by the BACB® as meeting the course work requirements for eligibility to take the national certification exam. The curriculum has been

designed to meet the accreditation standards of the Behavior Analysis Accreditation Board (BAAB).

Statewide Educational Opportunities: The MS-ABA will build upon the Graduate Certificate in ABA and continue to offer coursework and practicum sites to students throughout Oregon. The Graduate Certificate offers courses to students via synchronous video-conferencing (Zoom), combining the ease of access of an online program with the intimate interactiveness of an on-campus program.

Foster Student and Graduate Success: The program provides students with the knowledge and skills necessary for immediate employment. The curriculum and practicum experiences prepare students to meet national certification and Oregon licensure requirements. Graduates will have the academic training as well as valuable hands-on experience to be effective and ethical behavior analysts.

Emerging Needs: The MS-ABA supports Oregon Tech's mission to meet the needs of Oregon's citizens by providing the educational experience that will allow graduates to provide critical expertise in addressing serious social problems. The need for behavior analysts to provide ABA services to children with autism is great. This program will allow Oregon Tech to meet the demand for an accessible Master's degree program. This program will provide a pathway for professionals entering or already working in the autism field to earn the credential they need in order to continue to provide these services in Oregon under the new administrative rules established by the Behavior Analysis Regulatory Board (BARB). In addition to addressing the immediate and urgent need for behavior analysts to work in autism, graduates of the program will be prepared to address emerging needs in myriad educational, behavioral health, and organizational areas where behavior analysts work.

Signature Area of Focus

Oregon Tech has been a leader in the state in developing and providing education and training in ABA. ABA has been a signature area of focus for Oregon Tech since 2011 when the undergraduate ABA course sequence was approved by the BACB® as meeting the course work requirements for national certification as an assistant behavior analyst (BCaBA). Oregon Tech began offering graduate courses in ABA in 2013. The courses were approved by the BACB® as meeting the course work requirements for national certification as a behavior analyst (BCBA) in 2014. Oregon Tech began offering a Graduate Certificate in ABA in 2015. In response to the growing demand for licensed behavior analysts in Oregon and the lack of an Oregon-based master's degree related to ABA, Oregon Tech partnered with Southern Oregon University to deliver a Master's degree in Education with emphasis in ABA and Autism Spectrum Disorders (ASD). This unique collaboration allowed our universities to respond quickly to an urgent need for qualified ABA therapy providers. Oregon Tech, with support from the Oregon Talent Council, is working to develop a statewide supervision network to meet the need for supervised experience. Oregon Tech has developed strong, positive industry partnerships from which we have created an excellent pool of adjunct instructors who serve our ABA programs as instructors and advisors for curriculum development and are ready to bring their expertise to the MS-ABA. Our industry partners are eager to establish practicum sites for the ABA programs. Centria Health, Cascade Behavioral Interventions, and A Hope for Autism are actively engaged with Oregon Tech as partners for the OTC grant. Oregon Tech has a well-established

commitment to developing this new sector of behavioral health services in the state of Oregon. The next step for Oregon Tech is to build upon our established programs and implement the MS-ABA which will allow us to meet the need for highly qualified behavior analysts who are prepared to provide ABA services in all areas.

Strategic Priorities

The Oregon Tech Strategic Action Plan (<http://www.oit.edu/docs/default-source/faculty-staff-documents/strategic-plan/strategic-action-plan.pdf?sfvrsn=4>) identifies four core themes and five goals. The MS-ABA is clearly aligned with the university's strategic priorities. The MS-ABA is an applied degree program designed to ensure student and graduate success, and provide statewide educational opportunities. The MS-ABA program will contribute to the achievement of Oregon Tech's five strategic goals in the following ways.

Goal 1: Student Success.

The MS-ABA is designed to foster student success by providing a degree that prepares students to meet the workforce demand for the highly qualified behavior analysts, providing statewide access to courses and practicum opportunities, maintaining low in-class student-to-faculty ratios, and establishing practicum opportunities with industry partners throughout Oregon.

Goal 2: Faculty and Staff Success.

The MS-ABA curriculum requires students to complete a thesis. This requirement provides faculty with the opportunity to engage in applied research, allowing faculty to be supported in their professional development. The rigorous curriculum and thesis requirements will attract and contribute to the retention of faculty who are passionate about their profession and eager to share that passion with students.

Goal 3: Economic and Workforce Connections

The Oregon Talent Council has identified behavioral health workers as a pivotal, high demand occupation. The MS-ABA is designed to contribute to the economic development of Oregon by providing the education and training needed to meet this mission-critical workforce demand and is built upon our positive relationships with industry partners. The statewide focus of the program will allow us to meet the workforce demand in urban and rural areas of the state and to serve all Oregonians.

Goal 4: Student Access and Diversity

The MS-ABA program is designed to facilitate student access, providing the options for face-to-face courses that can be attended on campus or via Zoom. Statewide access to the program is especially beneficial for students in rural areas of the state. Diversity in the student population is desirable and students from rural areas and from underserved populations will be encouraged to apply.

Goal 5: University Financial Success

The MS-ABA will attract new students to the university, thus contributing to enrollment growth and the financial success of the university. The MS-ABA may attract students to our

undergraduate ABA programs as well as attracting our recent graduates to return to Oregon Tech for the MS degree.

- b. Manner in which the proposed program contributes to institutional and statewide goals for student access and diversity, quality learning, research, knowledge creation and innovation, and economic and cultural support of Oregon and its communities.

Student access and diversity

The MS-ABA program is designed to facilitate student access, providing the options for face-to-face courses that can be attended on campus or via Zoom. Statewide access to the program is especially beneficial for students in rural areas of the state. Diversity in the student population is desirable and students from rural areas and from underserved populations will be encouraged to apply.

Quality learning:

In addition to providing a rigorous curriculum, and conducting regular assessment of learning outcomes, the program will admit students who have the necessary characteristics to succeed in this field. In order to ensure that students will have the necessary preparation for success in the MS-ABA program, applicants for admission to the program must meet the Oregon Tech Graduate Programs Admission requirements as well as MS-ABA program specific requirements.

Applicants to the MS-ABA program at Oregon Tech shall meet the following requirements:

- Undergraduate coursework: Bachelor’s degree from an accredited four-year institution in Psychology or a related field and coursework with a grade of C or better in Research Methods and Statistics,
- Academic Standing: be in good academic standing at last college or university attended,
- GPA: Overall undergraduate GPA of 3.0 on a 4.0 scale for the last 90 term (60 semester) units attempted and for the last 45 term hours of the major (or graduate GPA of 3.0),
- GRE Scores: Graduate Record Examination scores for Verbal Reasoning at 150, for Quantitative Reasoning at 14, and for Analytical Writing at 3.5. GRE scores over five years old are not accepted.
- Background Check: Because of the nature of the degree and the subsequent use of practicum requirements to work with children and/or other vulnerable populations, all applicants must be able to pass a criminal background check – such as that conducted by the Oregon Department of Human Services (DHS) or Head Start,
- Personal Statement: applicants will be required to write a statement that addresses career goals and relevance to the program, evidence of aptitude for graduate work and evidence of potential for success in the field,
- Reference Letters: Applicants to the program will be required to provide three academic and professional letters of reference that address the applicant’s preparation, abilities, and character,
- Other: International students may have additional admission requirements including TOEFL scores (minimum of 550 paper-based TOEFL, 213 computer-based TOEFL, 79 Internet-based TOEFL, or 6.5 IELTS), transcript evaluations and visa requirements.

Research, knowledge creation and innovation: The MS-ABA will require students to complete a thesis as part of the curriculum. The practice of ABA emphasizes the use of research methods in treatment delivery, thus providing a natural opportunity to advance research interests of faculty, students, and the university.

Economic support of Oregon and its communities:

The MS in ABA at Oregon Tech will provide statewide access to the education that professionals need in order to practice and be reimbursed for ABA services, determined at both the state (through the Oregon Behavior Analyst Regulatory Board (BARB)) and national (through the BACB®) levels. The program will deliver a quality educational learning experience as evidenced by the BACB® approval of the curriculum.

The use of synchronous videoconferencing technology provides an alternative to the fully online programs for students in all areas of the state who prefer the real-time, face-to-face educational experience.

Providing the education and training in ABA supports the economic development of communities throughout Oregon by contributing to the workforce development in an emerging, mission-critical sector.

- c. Manner in which the program meets regional or statewide needs and enhances the state's capacity to:
 - i. improve educational attainment in the region and state;
The MS-ABA contributes to the state's capacity to achieve the goal of 40-40-20 by providing statewide access to a MS degree that prepares graduates to enter the workforce prepared to meet the demand for highly qualified ABA professionals.
 - ii. respond effectively to social, economic, and environmental challenges and opportunities; and
MS-ABA has been developed in response to the need for highly qualified behavior analysts to provide ABA therapy. This program will contribute to the state's capacity to meet the social challenges of providing ABA therapy. Providing the education and training for individuals to meet certification and licensure requirements will allow Oregonians to meet workforce demands and thereby contribute to the economic development of communities.
 - iii. address civic and cultural demands of citizenship.
Ethics and professionalism components of the curriculum will directly address the responsibilities of graduates, including the responsibility to participate in such civic responsibilities as serving on regulatory boards.

3. Accreditation

- a. Accrediting body or professional society that has established standards in the area in which the program lies, if applicable.

The Behavior Analyst Certification Board® (BACB) is the credentialing body for behavior analysts. The BACB® establishes the requirements for national certification and reviews and approves university course sequences in applied behavior analysis that meet the coursework requirements. The MS-ABA curriculum includes the BACB® approved course sequence for the BCBA credential. There are no fees associated with BACB® approval.

Behavior Analysis Accreditation Board (BAAB) accredits bachelors, masters and doctoral programs in behavior analysis. The fees for BAAB accreditation are listed below.

Accreditation Fees

\$2,000 Application Fee per program

\$2,000 Annual Fee

\$2,000 Re-Accreditation Fee

Domestic Site Visits

\$800 Accreditation Site Visit (per site visitor, minimum two visitors)

\$800 Re-accreditation Site Visit (per site visitor, minimum two visitors)

\$1,250 Resource Visit Fee (Optional)

- b. Ability of the program to meet professional accreditation standards. If the program does not or cannot meet those standards, the proposal should identify the area(s) in which it is deficient and indicate steps needed to qualify the program for accreditation and date by which it would be expected to be fully accredited.

The program has been designed to meet the accreditation standards and there are no anticipated obstacles to achieving accreditation.

- c. If the proposed program is a graduate program in which the institution offers an undergraduate program, proposal should identify whether or not the undergraduate program is accredited and, if not, what would be required to qualify it for accreditation.

Oregon Tech does not offer an undergraduate degree in Applied Behavior Analysis. Oregon Tech does offer a five-course undergraduate sequence in ABA that has been evaluated and approved by the BACB® as meeting the course work requirements for eligibility to take the national certification exam for Board Certified Assistant Behavior Analyst (BCaBA).

- d. If accreditation is a goal, the proposal should identify the steps being taken to achieve accreditation. If the program is not seeking accreditation, the proposal should indicate why it is not.

The MS-ABA program will seek accreditation from the BAAB. The first step towards accreditation is to design the curriculum to meet the standards. The proposed curriculum has been designed to meet the BAAB standards. The next step is to conduct a self-study. The self-study will require data collected over a period of at least five years. Once the program has been approved and implemented, we will begin work on the self-study.

4. Need

- a. Anticipated fall term headcount and FTE enrollment over each of the next five years.

	2017/18	2018/19	2019/20	2020/21	2021/22
New	15	15	15	15	15
Returning	15	15	15	15	15
Total	15	30	30	30	30

- b. Expected degrees/certificates produced over the next five years.

2017/18	2018/19	2019/20	2020/21	2021/22
---	15	15	15	15

- c. Characteristics of students to be served (resident/nonresident/international; traditional/nontraditional; full-time/part-time, etc.).

We expect to serve students from across Oregon as well as students from contiguous states, including both traditional and non-traditional students.

It is understood that some students may choose to attend the program on a part-time basis, which would decrease the number of credits taken per term, and increase the number of terms to earn the degree.

- d. Evidence of market demand.

Behavior analysts are in high demand in a variety of behavioral health and industry related areas. The need for behavior analysts to provide ABA services to children with autism is particularly urgent. However, ABA is not limited to serving families and individuals affected by autism. Behavior analysts provide services across a wide variety of populations (including autism, intellectual and developmental disabilities, psychological impairment, and traumatic brain injury as well as typically-developed populations) and work in a variety of settings (homes, clinics, schools, organizations, and in the community) to enhance independence, productivity, manage performance, and reduce harm. As the applicability of behavioral services becomes more apparent, so too does the demand for BCBA’s and for graduate training programs that offer curriculum that can result in behavior analyst certification.

In May of 1998 the Behavior Analyst Certification Board, Inc.[®] was formed to develop national certification standards for practicing behavior analysts. This organization grew from a demand for competent practitioners who could provide services to the rising number of children and families affected by autism spectrum disorder. The number of students meeting autism diagnostic criteria within public schools is estimated to be between 1 in 88 and 1 in 50, more than any other disability category in the country.

Demand for Behavior Analysts can be seen in the tremendous growth in professionals certified by the BACB[®]. A 2015 workforce report (Appendix C) indicated increasing demand for behavior analysts. This demand for BCBA’s is reflected by the increase in job postings for behavior analysts, with 116% growth between 2012 and 2014. Positions requiring the BCBA credential were found across a range of occupations and industries, including health care, educational services, and social assistance.

A recent search online for job postings for BCBA[®]s found 2,244 postings (<http://www.indeed.com/q-Board-Certified-Behavior-Analyst-Bcba-jobs.html> retrieved 9/5/2016).

The results from 2014 survey conducted by the Association for Professional Behavior Analysts (APBA) provides additional evidence of growth in ABA (Appendix D). They noted that the number of behavior analysts holding BACB credentials nearly tripled between the years of 2008 and 2014. They reported that the modal income for behavior analysts was between \$65,000 and \$75,000, with 30% reporting income over \$75,000. Behavior analysts reported working in a variety of areas including autism spectrum disorders, intellectual and

developmental disabilities, education, child welfare, brain injury, corrections and delinquency, and organizational behavior management.

In Oregon, the demand for behavior analysts has increased since passage of legislation in 2013 that removed insurance coverage barriers to accessing ABA services and created the Behavior Analysis Regulatory Board (BARB) and the licensure of behavior analysts and assistant behavior analysts. Although there are more than 15,000 certificants registered with the BACB®, only 80 reside in Oregon. Oregon has approximately 10,000 children between the ages of 3 and 21 diagnosed with autism. The current number of BCBA®s is alarmingly inadequate to meet the needs of this population with industry analysis indicating an immediate need for an additional 1,300 licensed providers. This need for qualified providers was highlighted in an article in the Bend Bulletin (<http://www.bendbulletin.com/home/1371292-151/therapy-helps-ease-autism#>) (see Appendix E).

The Oregon Talent Council (OTC) has recognized the demand for qualified ABA providers and awarded Oregon Tech a grant to develop a university-based supervised practicum for training ABA providers. The Oregon Talent Plan identified mental and behavioral health counselors as “mission critical occupations”, with frontline behavioral health providers in high demand, especially in rural areas. Oregon Tech’s OTC grant will address the critical need for qualified Applied Behavior Analysis (ABA) therapy providers to serve the growing population of children with autism. Oregon Tech is working with three ABA providers to establish practicum sites. Centria HealthCare, Cascade Behavioral Interventions, and A Hope for Autism have joined with Oregon Tech in order to meet their growing workforce needs. (see Appendix F)

The MS-ABA program will provide a pathway for professionals entering or already working in the autism field to earn the credential they need in order to continue to provide these services in Oregon under the new administrative rules established by the Behavior Analysis Regulatory Board (BARB). The MS-ABA also provides the foundation in ABA that prepares professionals to pursue employment as behavior analysts across populations and settings.

- e. If the program’s location is shared with another similar Oregon public university program, the proposal should provide externally validated evidence of need (e.g., surveys, focus groups, documented requests, occupational/employment statistics and forecasts).

There are no other ABA master’s degree programs offered in the Oregon public university system; Oregonians do not have access to a local program in ABA and are left with the choice of moving or seeking the degree through online programs only.

- f. Estimate the prospects for success of program graduates (employment or graduate school) and consideration of licensure, if appropriate. What are the expected career paths for students in this program?

The program is designed to provide students with the approved course work and supervised experience necessary to meet the requirements to be eligible for the national certification exam. Students who pass the national exam will be eligible for licensure as Behavior Analysts in Oregon.

Some students who complete the program may decide to pursue a doctoral program. Others may seek employment as behavior analysts in a variety of settings and working with a variety of client populations. It is expected that many graduates will work for agencies that provide ABA therapy to individuals with autism and other disabilities. Graduates may also pursue opportunities to provide independent consulting to schools, businesses or organizations.

5. Outcomes and Quality Assessment

- a. Expected learning outcomes of the program.
 1. Students will understand the history and philosophy of behaviorism and basic theoretical approaches to understanding behavior.
 2. Students will demonstrate competence in understanding how principles of behavior are discovered and described in the context of basic research.
 3. Students will use technical terminology to explain and provide examples of the characteristics, concepts, principles, and processes of behavior analysis.
 4. Students will demonstrate an understanding of, and ability to conduct behavioral assessments and functional behavioral analyses, and identify strengths and limitations of
 5. Students will demonstrate competence in the measurement of behavior, data collection, data analysis, and graphic representation.
 6. Students will demonstrate competence in single-subject research designs and will identify and describe the advantages, disadvantages, and ethical considerations of research designs
 7. Students will critically evaluate research, analyze, and apply research findings to the practice of applied behavior analysis.
 8. Students will explain the fundamental elements of behavioral interventions including behavior change strategies, procedures and systems, including identification of scientific evidence and methods for ensuring effective implementation and maintenance of behavioral programs.
 9. Students will demonstrate an understanding of the legal constraints and ethical guidelines as pertinent to behavioral research and practice.
 10. Students will demonstrate an understanding of the roles, functions, and responsibilities of professional behavior analysts, including relationships with professional organizations, and maintaining professional credentials.
 11. Students will demonstrate the professional skills essential to developing professional and therapeutic relationships, set goals, maintain boundaries, evaluate client outcome, terminate treatment, and collaborate with other professionals
 12. Students will demonstrate competent oral and written communication.
- b. Methods by which the learning outcomes will be assessed and used to improve curriculum and instruction.

The program will follow the procedures for assessment as identified by the Oregon Tech Commission on Assessment. Annual department reports and assessment reports will include information about the program objectives. Assessment of program objectives will include measures of graduation rates, post-graduation employment and/or continuing education rates, pass rate of graduates on licensure exams, and feedback from current students (in the form of course evaluations), graduating students (exit surveys), and

practicum and internship site supervisors. Additional post-approval monitoring will be reflected in the accreditation process as we apply for and maintain accreditation for the program. Program faculty will utilize the assessment data and reports to guide program development and changes, if necessary. The particular changes that might be required would be determined by the assessment results. Student learning will be assessed utilizing a variety of direct and indirect measures. Measures may include:

- student performance on exams,
 - direct observation of skills in role plays and in applied settings as measured by skill checklists and/or rubrics,
 - self-assessment of knowledge, skills, and abilities (e.g., self-assessment portion of practicum evaluation), and
 - evaluation of student performance by practicum site supervisors.
- c. Nature and level of research and/or scholarly work expected of program faculty; indicators of success in those areas.
Program faculty will be expected to meet expectations for professional development as described in the Oregon Tech tenure and promotion policies.

The MS-ABA curriculum includes a thesis. Program faculty will be expected to supervise student research. Indicators of success include the number of student theses completed, number of student/faculty presentations and publications.

6. Program Integration and Collaboration

- a. Closely related programs in this or other Oregon colleges and universities.

No other colleges or universities in Oregon currently offer a Master's of Science degree in Applied Behavior Analysis.

Oregon Tech offers a graduate certificate in ABA. The University of Oregon offers a BACB® approved course sequence on-campus as a component of their special education and school psychology programs. Portland State offers the courses through their online special education programs. Oregon Tech and Southern Oregon University offer a joint, one-year, Master's in Education degree with emphasis in Autism Spectrum Disorder and Applied Behavior Analysis.

The proposed MS-ABA is distinctly different from these programs in scope and emphasis. The MS-ABA focuses specifically on applied behavior analysis and applications beyond special education.

- b. Ways in which the program complements other similar programs in other Oregon institutions and other related programs at this institution. Proposal should identify the potential for collaboration.

Oregon Tech currently collaborates with SOU to offer the joint MEd in ABA/ASD. We will continue to collaborate with SOU to offer this degree. The supervised practicum course may be attractive to students in ABA programs that lack the practicum component. We will continue to explore opportunities to collaborate.

- c. If applicable, proposal should state why this program may not be collaborating with existing similar programs.

NA

d. Potential impacts on other programs.

There are no other MS-ABA programs in Oregon; therefore, it is unlikely that this degree offering will significantly impact other programs. This program will attract students who are interested in applied behavior analysis but are not necessarily interested in pursuing a degree in special education. Currently, the choice for this population of students is to move out of state or to attend an online master's program.

7. External Review

If the proposed program is a graduate level program, follow the guidelines provided in *External Review of New Graduate Level Academic Programs* in addition to completing all of the above information.

Revised May 2016

Report Summary

External Review of New Graduate Level Academic Programs

External Reviewers:

Tim Hackenberg, Professor of Psychology, Reed College

Dave Pyles, Associate Professor, The Chicago School of Professional Psychology

Tyra Sellers, Assistant Professor, Utah State University

Dates of Review: 01/23/2017 & 01/24/2017

Date of Report: 01/31/2017

Purpose: The purpose of this review was to evaluate Oregon Institute of Technology's (OIT) proposal for a new Master of Science in Applied Behavior Analysis (ABA) degree program in the College of Health, Arts, and Sciences, Department of Humanities and Social Sciences/Applied Behavior Analysis. This review was based on specific goals and criteria set forth by the Higher Education Coordinating Commission (HECC). One reviewer resides and is faculty at a college in Oregon and the other two reviewers are from peer institutions outside of Oregon.

Summary of External Review Activities: The evaluators reviewed the various documents provided by OIT, conducted on-site visits of the Klamath Falls and Wilsonville campuses, and conducted interviews with seven students (two undergraduates and five master's students) and the faculty/administrators listed below.

- Alice Austin, Faculty
- John Borgen, Faculty
- Melissa Gard, Faculty
- MariaLynn Kessler, Faculty
- Ryan Madden, Faculty
- LeAnn Maupin, Interim Provost, Dean, College of Health, Arts & Sciences
- Laura McKinney, Vice President for the Wilsonville campus
- Mark Neupert, Department Chair

Summary of Areas of Evaluation: The external reviewers assessed the proposed program, in terms of current feasibility, as well as projected future growth and success. Below are summary statements addressing the four primary areas indicated by HECC: (A) Program, (B) Faculty, (C) Need, and (D) Resources.

A. Program

The proposal seeks to create and develop a stand-alone Master's level degree in Applied Behavior Analysis (ABA). As spelled out in the proposal, the need for applied behavior analysts is at all-time high in Oregon, and continues to grow. At present, there are no similar programs in the state to meet such needs. The proposed program would be an important step in this direction, providing students with access to education and training for high-demand jobs that address pressing social problems.

The program would be the first stand-alone MS in ABA program in the state of Oregon, and will be uniquely situated to effectively train qualified professionals in ABA. At present, students wishing to meet the *Behavior Analyst Certification Board (BACB)* certification requirements, and ABA licensing requirements have but few options. For example, one program offers online courses from an ABA program in a different state, but includes no provision for the clinical supervision hours required by the BACB to become a *Board Certified Behavior Analyst (BCBA)*. To increase opportunities for ABA training, OIT recently developed a joint master's program with Southern Oregon University in Autism Spectrum Disorders (ASD) and ABA. While serving this population with ABA services is a pressing need, we should point out that ABA extends well beyond ASD (e.g., direct service to individuals with intellectual disabilities, educational services, organizational behavior management and human performance management, to name just a few). Graduates of the ABA program would therefore be employable in various settings addressing a range of populations including but not limited to ASD. The current program would complement but not replace these existing opportunities, enabling ABA students to obtain the training needed to meet all the requirements of the major licensing entities, and to gain employment in a rapidly growing field.

A major strength of the program is a rigorous and highly structured curriculum, with small classes and hands-on clinical and research supervision from highly trained experts in ABA. Building on communication technology already in place, the courses would be broadly accessible throughout the state, including remote regions and to traditionally underserved populations. The faculty are exceptionally well qualified to teach and supervise, having demonstrated success in meeting the needs of a diverse student population across the state both within the current OIT program and in the community through partnerships with professional organizations and local clinical providers of ABA. The program would be administered through the department of Humanities and Social Sciences, a unit with an excellent track record of productive training programs, including the newly established Marriage and Family Therapy Masters program.

In addition to rigorous teaching and research requirements, another distinctive strength of the program is an intensive practicum experience in accord with the BACB's supervision requirements. Students will receive 750 hours of supervised practice with 10% of those hours being supervised on a weekly basis. The BACB Supervision Guidelines allow half the supervision hours to be conducted in a group setting, with the other half to be done one-on-one with a qualified supervisor. The remaining 50% of the supervision occurs one-on-one with a BACB at the practicum site. These intensive practicum experiences would increase the (a) frequency and total amount of supervised hours from BCBA and BCBA-Ds (Doctoral level BCBA), (b) quality of the clinical experience and the amount of crossover between the course content and the clinical activities, and (c) rate at which the students accrue experience hours, allowing them to complete the requirements and potentially sit for and pass the BACB exam in a timely manner, resulting in increased consumer access to much needed ABA services.

Success of the program will be evaluated in several ways, including (a) review by the major professional organizations, including coursework pre-approval by the BACB (the main credentialing organization in the field) (b) accreditation by the Behavior Analysis Accreditation Board of the *Association for Behavior Analysis International* (the main scientific and professional organization in the field), (c) BCBA exam pass rates, (d) student credit hours, (e), graduation rates, (f) professional contributions (e.g., publications, presentations at professional meetings), (g) employment after graduation, and (h) admission rates to doctoral programs.

A stand-alone program with integrated coursework and practicum curriculum is challenging, but

much of the groundwork for the program has already been laid. OIT received a state-funded grant from the Oregon Talent Council (OTC) in July 1st, 2016 – June 30th June 2017, to assess the needs for, and develop the provision of, clinical supervision for those pursuing certification while accruing required experience and supervision hours. Once the proposed program is launched, practicum experiences would take place either in an on-campus clinic or in partnership with local clinical providers. Some such partnerships with local providers have already been established and would expand with the growth of the program. These partnerships both expand the range of practicum opportunities, and serve as potential job placement sites, enhancing employment opportunities for graduates of the program.

There are other challenges relating to staffing (faculty and support staff) and to student recruitment and support, discussed in more detail below. Based on our interviews, OIT administrators are well aware of these challenges, and have outlined strategic plans to assess, prepare for, and address them. Needless to say, a responsive and forward-thinking administration is key to the sustained success of fledgling programs like this. We were therefore pleased to see such strong administrative support for the program.

B. FACULTY

Based on a review of the vitae provided, as well as interviews with several of the faculty and students, the review committee finds the current faculty to be of high quality for the courses outlined in the proposal. The faculty and adjunct instructors have taught courses in ABA for the past several terms and have clinical expertise in the field. Faculty members have been successful at securing grants from the state to directly benefit the proposed program. The proposal indicates the use of current faculty and adjunct professors, as well as an additional FTE faculty and an FTE practicum coordinator to be hired. There do not appear to be any obvious threats to sustainability (i.e., pending retirements); however, potential demand for enrollment in the program is a likely stressor on the current faculty numbers. The current faculty and administration indicated that they are committed to engaging in active assessment of needs for additional supports as the program grows and address identified needs through the department's regular strategic planning processes.

The main strengths of the current faculty and adjunct instructors include:

- All faculty and adjunct instructors have an expertise in Applied Behavior Analysis
- Faculty and adjunct instructors have diverse areas of clinical and research expertise that allow an offering of a variety of courses and relevant experiences for students
- Adjunct instructors are local ABA practitioners and are active in the state-level ABA organizations, providing the program with a direct line to the community of consumers and other relevant resources, in terms of potential students, clinical practicum placements, and client consumers of ABA services
- All faculty and instructors have experience with delivering instruction and supervision in both face-to-face and distance formats

The faculty workload is fairly heavy, requiring them to teach 3-4 courses each quarter. The faculty members are also in charge of providing student advising, research oversight, and mentoring. This workload is offset by the use of local clinical ABA practitioners as adjunct instructors and supervision practica. Finally, the workload will be offset by the addition of the new FTE faculty and coordinator positions. As mentioned above, the faculty and administration are aware of the likelihood that enrollment will increase significantly once the program is active.

To address this, they are forecasting the need for increased faculty and administrative supports in the department strategic planning meetings.

C. NEED

The proposal, along with Appendices C and D (Behavior Analyst Workforce Demand & 2014 APBA Employment Survey Prelim Report), clearly indicate an immediate and growing demand for clinical-level providers in ABA, specifically those who are board certified (BCBA). This need is driven by several relevant variables. Oregon recently passed legislation mandating that insurance companies cover ABA services for individuals with ASD, as well as enacted licensure for professionals wishing to provide those services. There is a current dearth of ABA providers in Oregon, but a pressing need for services. According to the Center for Disease Control and Prevention, approximately 1 in 68 children have been identified with ASD, and 1 in 6 children in the United States is diagnosed with an intellectual disability. Another relevant variable is the lack of a program offering a stand-alone graduate degree in ABA that incorporates the required course sequence and experience/supervision to meet the requirement for becoming a BCBA. The proposed program by OIT will provide students with an opportunity to access a graduate degree in ABA within the state, which is currently not available. Graduating students who remain in Oregon and provide clinical ABA services will be providing a direct benefit to the community. Those OIT-graduate providers are also likely to act as a pipeline, directing therapists into OIT's undergraduate and/or graduate programs. They may also serve as supervisors and practica placements through OIT. Interested students from neighboring states without easy access to similar ABA graduate programs may also elect to relocate to Oregon to pursue the program at OIT.

D. RESOURCES

Based on our interviews with OIT administrative staff and faculty and review of the program proposal, we will address below the current and projected resources in the following areas: (1) Faculty and staff, (2) Student recruitment and support, and (3) Infrastructure.

1. Faculty and staff

The current plan is to hire one faculty and a practicum coordinator for the new program. These numbers should be adequate as the program begins, but may need to be expanded as the program grows and more courses are offered and a greater number of students require clinical and research supervision. One faculty line is requested to help accommodate the needs of the program as a whole, including teaching, advising, and research and clinical supervision. This line is well justified, given the needs of what promises to be a popular program. Given the timing of program onset, however, it is likely that this position would not be filled until Year 2, providing sufficient time for a proper search. This would also give faculty a better sense of greatest need in the program after its first year. A more immediate staffing need is for the second requested position, that of Practicum Coordinator. The school currently has a practicum coordinator, Dawn Bailey, PhD, funded in part by the OTC grant, but this grant will end later this year. Given the intensive practicum requirements in the program (described in Section A), this type of position is much needed and well justified.

The number of faculty (including the addition of one FTE faculty and one program coordinator when the program starts) thus appears adequate for initiating the program. The program as designed is robust, however, and will require the development of new courses as well as research and clinical supervision. These tasks will require a great deal of faculty time and energy. The need for additional faculty to serve in these roles should be evaluated on an ongoing basis, and

will likely require additional resources as the program matures.

In addition to faculty lines, adequate administrative and clerical support is needed to ensure the myriad of factors requiring coordination are managed efficiently (e.g., class scheduling and enrollment proceeds smoothly, administrative difficulties are addressed, announcements made, necessary meetings occur). Currently, faculty members are serving in an advisory capacity, which may be adequate for the current situation and program. Once the program has been established, however, it would be much more cost effective to have a designated person (e.g., administrative assistant) perform those duties and to design systems for smooth departmental operations. This would help ensure that faculty time is freed up for the program-critical functions of teaching, supervision, and mentoring. Financially, it would make sense to have an administrative assistant handling such tasks than comparably more expensive faculty.

The school allocates funds for faculty conference attendance, which currently is enough to cover registration at the annual ABAI conference, but not travel and other expenses. Publications and presentations at state and national conferences raise the visibility of the program, and are helpful for recruiting both students and faculty.

2. Student recruitment and support

Critical to the success of the program will be student recruitment and retention. To that end, we discussed in our interviews some of the ways the institution has thought to enhance the visibility of the program, including advertising and marketing with local colleges and service providers. Another effective recruitment tool is to present posters at professional meetings (as mentioned above). The annual ABAI meeting, for example, includes a poster session featuring training opportunities in the field, at which student and faculty representatives provide information to prospective students. Thus, along with faculty travel support, it will be important to also provide access to travel funds by students.

Graduates of the undergraduate applied psychology program at OIT would also provide a steady stream of qualified applicants, especially those in the ABA track. We also heard about some interesting plans to develop partnerships with local community colleges, offering some introductory ABA courses, to help feed the OIT undergraduate program while simultaneously preparing those students for employment as behavior technicians while they attend school. Although such efforts are not directly related to the proposed Masters program, they are part of a coordinated and strategic approach to recruitment for highly qualified applicants to the program. And while it seems likely that the rigor of the program and the professional opportunities in the state will attract students from neighboring states (e.g., California, Washington, Idaho, Utah), the primary focus would be on serving the needs of students in the state of Oregon.

To retain students once they are admitted, a concerted effort should be made to provide some means of financial support (e.g., scholarships, teaching assistantships, reduced tuition, and/or out-of-state tuition waivers) to help defray the costs of obtaining the degree in a timely fashion. Because some (and perhaps many) students will also be working outside the program, timely progress will depend on students striking a balance between program requirements and living costs. It follows, then, that financial assistance that enables students to work fewer hours outside the program will facilitate timely progress through the program (one of the benchmarks for success described in Section A).

3. Infrastructure

We found the current facilities and equipment to be sufficient for the proposed program. For remote classrooms, the school is using Zoom, which is HIPAA compatible. That level of

security is important, because practicum supervision will be conducted in groups remotely, and will involve discussion of protected information. There are some potential stresses related to the compatibility of the equipment across campuses and remotely that has caused delays in starting classes on time and will be addressed by the CIO when that person is hired.

The program has proposed \$4500 for its budget for library support. Currently, the library has a subscription to the *Journal of Applied Behavior Analysis*, the flagship journal of applied behavior analysis. It has electronic subscriptions to several other journals, some of which limit the availability of copies unless the school also has a subscription to hard copies as well. Should that problem interfere with student and faculty accessing those journals, the budget may need to be adjusted to allow unlimited access.


Summary

In sum, the program is well suited to train emerging professionals in a growing market. The rigorous curriculum, that includes extensive coursework and research and clinical supervision, should enhance the pass rates for the BCBA examination. Obtaining BCBA certification comes with substantial salary increases from what students would earn without it. This influx of well paid professionals (i.e., taxpayers) would additionally enhance the revenue base for the state. The proximity of the different campus programs to the states of Washington, Idaho, and California should also help maximize employment opportunities for graduates in a profession where there are approximately 6-10 positions for each person to fill them, and a demand that continues to grow as more and more disciplines recognize the extent to which behavior analysts provide measurable improvement in their services.

These external factors will help ensure the continued need for qualified BCBAs, but the sustained success of the program will require ongoing administrative support. We were therefore heartened to see a shared enthusiasm and vision among the faculty and administration for creating and maintaining a high quality program, including strategic planning for its continued growth and success. All of the people with whom we spoke expressed a clear understanding of the need for the program and its distinctive niche in Oregon, and in assessing the market forces making it likely that students will have practica and employment after graduation.

Together with the hands-on training of practical skills that meet such workforce demands, the partnerships with industry fit with the mission, strategic objectives, and educational philosophy of OIT. And because the program would be the first of its kind in the state, it would help set the standards for educational rigor and professional readiness for future generations of applied behavior analysts.

EXTERNAL REVIEW RESPONSE

To: LeAnn Maupin, Interim Provost
From: Maria Lynn Kessler 
Re: Response to MS-ABA External Review Panel Report

January 31, 2017

In accordance to policy, an external review of the proposed MS in Applied Behavior Analysis (MS-ABA) program has been conducted. The external review panel was composed of three highly qualified individuals, including Tim Hackenberg, PhD, Dave Pyles, PhD, BCBA-D, and Tyra Sellers, PhD, BCBA-D. The external review panel site visit was conducted on January 23-24, 2017, with visits to both the Klamath Falls and Wilsonville campuses. Enclosed, please find the external review panel report.

The panel conducted a thorough review of the program, faculty, need, and resources. The panel was positive in their review of the program. No revisions, minor or significant, were identified by the panel.

The report emphasized the following strengths of the proposal: a) the unique nature of a stand-alone ABA training program that incorporates an intensive practicum and prepares students to work not just in autism related jobs but broadly across multiple ABA related fields; b) the rigor of the curriculum including coursework, practica, and research requirements; c) statewide accessibility of the program; d) highly qualified faculty; e) adequate resources to support implementation of the program; and f) the enthusiasm and shared vision of faculty and administration for the program. The panel noted that new programs typically face challenges and note that the administration is aware of and prepared to address these challenges.

The ABA program faculty and HSS department concur with the External Review Panel Report and feel confident in moving forward in the approval process.

Budget Outline Form

Estimated Costs and Sources of Funds for Proposed Program

Total new resources required to handle the increased workload, if any. If no new resources are required, the budgetary impact should be reported as zero.

Institution: Oregon Institute of Technology

Indicate the year: X First _____ Second
 _____ Third _____ Fourth

Program: MS in Applied Behavior Analysis

Prepare one page each of the first four years

Academic Year: 2017/2018

	Column A From Current Budgetary Unit	Column B Institutional Reallocation from Other Budgetary Unit	Column C From Special State Appropriation Request	Column D From Federal Funds and Other Grants	Column E From Fees, Sales and Other Income	Column F LINE ITEM TOTAL
Personnel						
Faculty (Include FTE)	\$113,000 (2.0)					\$113,000 (2.0)
Graduate Assistants (Include FTE)	n/a					
Support Staff (Include FTE)	n/a					
Fellowships/Scholarships	n/a					
OPE	\$49,720					\$49,720
Nonrecurring	n/a					
Personnel Subtotal	\$162,720					\$162,720
Other Resources						
Library/Printed	n/a					
Library/Electronic	\$4,500					\$4,500
Supplies and Services	\$1,454					\$1,454
Equipment – new computer	\$2,000					\$2,000
Other Expenses – software & licenses	\$1,999					\$1,999
Other Expenses – Travel (practicum)	\$6,000					\$6,000
Other Expenses – Marketing & recruiting	\$5,000					\$5,000
Other Resources Subtotal	\$209,53					\$209,53
Physical Facilities						
Construction	n/a					
Major Renovation	n/a					
Other Expenses	n/a					
Physical Facilities Subtotal	0					
GRAND TOTAL	\$183,673					\$183,673

Budget Outline Form

Estimated Costs and Sources of Funds for Proposed Program

Total new resources required to handle the increased workload, if any. If no new resources are required, the budgetary impact should be reported as zero.

Institution: Oregon Institute of Technology

Indicate the year: _____ First _____ Second
 _____ Third _____ Fourth

Program: MS in Applied Behavior Analysis

Prepare one page each of the first four years

Academic Year: 2018/2019

	Column A	Column B	Column C	Column D	Column E	Column F
	From Current Budgetary Unit	Institutional Reallocation from Other Budgetary Unit	From Special State Appropriation Request	From Federal Funds and Other Grants	From Fees, Sales and Other Income	LINE ITEM TOTAL
Personnel						
Faculty (Include FTE)	\$113,000 (2.0)					\$113,000 (2.0)
Graduate Assistants (Include FTE)	n/a					
Support Staff (Include FTE)	n/a					
Fellowships/Scholarships	n/a					
OPE	\$49,720					\$49,720
Nonrecurring	n/a					
Personnel Subtotal	\$162,720					\$162,720
Other Resources						
Library/Printed	n/a					
Library/Electronic	\$4,500					\$4,500
Supplies and Services	\$1,454					\$1,454
Equipment – new computer	n/a					
Other Expenses – software & licenses	\$1,999					\$1,999
Other Expenses – Travel (practicum)	\$6,000					\$6,000
Other Expenses – Travel (prof. dev.)	\$1,000					\$1,000
Other Expenses – Marketing & recruiting	\$5,000					\$5,000
Other Resources Subtotal	\$19,953					\$19,953
Physical Facilities						
Construction	n/a					
Major Renovation	n/a					
Other Expenses	n/a					
Physical Facilities Subtotal	0					0
GRAND TOTAL	\$182,673					\$182,673

Budget Outline Form

Estimated Costs and Sources of Funds for Proposed Program

Total new resources required to handle the increased workload, if any. If no new resources are required, the budgetary impact should be reported as zero.

Institution: Oregon Institute of Technology

Indicate the year: First Second
 X Third Fourth

Program: MS in Applied Behavior Analysis

Prepare one page each of the first four years

Academic Year: 2019/2020

	Column A	Column B	Column C	Column D	Column E	Column F
	From Current Budgetary Unit	Institutional Reallocation from Other Budgetary Unit	From Special State Appropriation Request	From Federal Funds and Other Grants	From Fees, Sales and Other Income	LINE ITEM TOTAL
Personnel						
Faculty (Include FTE)	\$113,000 (2.0)					\$113,000 (2.0)
Graduate Assistants (Include FTE)	n/a					
Support Staff (Include FTE)	n/a					
Fellowships/Scholarships	n/a					
OPE	\$49,720					\$49,720
Nonrecurring	n/a					
Personnel Subtotal	\$162,720					\$162,720
Other Resources						
Library/Printed	n/a					
Library/Electronic	\$4,500					\$4,500
Supplies and Services	\$1,454					\$1,454
Equipment – new computer	n/a					
Other Expenses – software & licenses	\$1,999					\$1,999
Other Expenses – Travel (practicum)	\$6,000					\$6,000
Other Expenses – Travel (prof. dev.)	\$1,000					\$1,000
Other Expenses – Marketing & recruiting	\$5,000					\$5,000
Other Resources Subtotal	\$19,953					\$19,953
Physical Facilities						
Construction	n/a					
Major Renovation	n/a					
Other Expenses	n/a					
Physical Facilities Subtotal	0					0
GRAND TOTAL	\$182,673					\$182,673

Budget Outline Form

Estimated Costs and Sources of Funds for Proposed Program

Total new resources required to handle the increased workload, if any. If no new resources are required, the budgetary impact should be reported as zero.

Institution: <u>Oregon Institute of Technology</u>
Program: <u>MS in Applied Behavior Analysis</u>
Academic Year: 2020/2021

Indicate the year: <u> </u> First <u> </u> Second <u> </u> Third <input checked="" type="checkbox"/> Fourth
Prepare one page each of the first four years

	Column A	Column B	Column C	Column D	Column E	Column F
	From Current Budgetary Unit	Institutional Reallocation from Other Budgetary Unit	From Special State Appropriation Request	From Federal Funds and Other Grants	From Fees, Sales and Other Income	LINE ITEM TOTAL
Personnel						
Faculty (Include FTE)	\$113,000 (2.0)					\$113,000 (2.0)
Graduate Assistants (Include FTE)	n/a					
Support Staff (Include FTE)	n/a					
Fellowships/Scholarships	n/a					
OPE	\$49,720					\$49,720
Nonrecurring	n/a					
Personnel Subtotal	\$162,720					\$162,720
Other Resources						
Library/Printed	n/a					
Library/Electronic	\$4,500					\$4,500
Supplies and Services	\$1,454					\$1,454
Equipment – new computer	n/a					
Other Expenses – software & licenses	\$1,999					\$1,999
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Other Expenses – Travel (prof. dev.)	\$1,000					\$1,000
Other Expenses – Marketing & recruiting	\$5,000					\$5,000
Other Resources Subtotal	\$19,953					\$19,953
Physical Facilities						
Construction	n/a					
Major Renovation	n/a					
Other Expenses	n/a					
Physical Facilities Subtotal	0					0
GRAND TOTAL	\$182,673					\$182,673

**APPENDIX A
FACULTY CURRICULUM VITAE**

Appendix A

Curriculum Vitae

John Borgen, PsyD, BCBA

Maria Lynn Kessler, PhD

Alice Austin, PhD, BCBA-D, LBA

Melissa Gard, PhD, BCBA-D, LBA

Jennifer White, MA, BCBA, LBA

Curriculum Vitae

John Borgen

Date CV Prepared: October, 2016

Address: 101 N. Wolfe St., Apt. 558
Baltimore, MD 21231
(954) 471-2124
jb2260@nova.edu

EDUCATION

8/10-6/15: Doctorate of Psychology, Clinical Psychology.

Nova Southeastern University, Fort Lauderdale, FL
American Psychological Association, accredited clinical psychology program
Directed Study: A Stimulus Control Procedure Increases Compliance in Children
Diagnosed with Autistic Disorder

8/07-12/09: Master's of Science, Clinical Psychology.

Marquette University, Milwaukee, WI
American Psychological Association, accredited clinical psychology program
Master's Thesis: Stereotype Threat and Attention-Deficit/Hyperactivity Disorder:
Academic Implications for Children and Adults

9/98-5/02: B.S., Child Psychology.

University of Minnesota, Minneapolis, MN

PROFESSIONAL CERTIFICATIONS

Board Certified Behavior Analyst – Doctoral

Certification Number 1-15-17931
Certification Effective 2/15

CLINICAL EXPERIENCE

9/15-8/16: Postdoctoral Fellow – Pediatric Feeding Disorders Clinic

Kennedy Krieger Institute, Johns Hopkins Hospital, Baltimore, MD
Responsibilities: Working with an interdisciplinary team and supervising implementation of behavioral interventions for pediatric feeding disorders in day treatment and inpatient settings. Conducting outpatient therapy focused on training parents to implement meal protocols and recommendations. Conducting intake evaluations as part of an interdisciplinary team. Developing, implementing, and evaluating research protocols along with writing manuscripts.
Supervisors: Peter Girolami, Ph.D., BCBA-D, Carrie Borrero, Ph.D., BCBA-D

1/15-6/15: Predoctoral Psychology Intern – Pediatric Feeding Disorders Clinic

Monroe-Meyer Institute, University of Nebraska Medical Center, Omaha, NE.
Responsibilities: Working with a multidisciplinary to implement behavioral interventions for

pediatric feeding disorders at an eight-week day treatment program. Conducting functional analyses, reinforcer assessments, implementing interventions, providing parent training both in clinic and in the home.

Supervisors: Suzanne Milnes, Ph.D., Cathleen Piazza, Ph.D., BCBA-D

7/14-12/15: Predoctoral Psychology Intern – Early Intervention Clinic

Monroe-Meyer Institute, University of Nebraska Medical Center, Omaha, NE.

Responsibilities: Providing specialized services for young children diagnosed with Autism Spectrum Disorder that include academic, social, and language skills. Participating in and writing reports evaluating children for an Autism Spectrum Disorder diagnosis. Providing outpatient therapy for children and families based on applied behavior analysis. Supervising and implementing research evaluations.

Supervisors: Amanda Zangrillo, Psy.D. BCBA-D, Nicole Rodriguez, Ph.D., BCBA-D, Wayne Fisher, Ph.D., BCBA-D

8/12-8/13: Psychology Trainee

Palm Beach County Youth Affairs Division, West Palm Beach, FL.

Responsibilities: Providing family therapy and psychological services to children and adolescents with varying reasons for seeking services or who are at risk for entering into the Florida Department of Juvenile Justice system, facilitating a parent education group, conducting psychological evaluations of agency referred clients and of children and adolescents referred by the juvenile justice system.

Supervisor: Shayna Ginsburg, Psy.D.

8/11-8/12: Psychology Trainee

Severe Behavior Disorder Program, Mailman Segal Center. Nova Southeastern University, Fort Lauderdale, FL.

Responsibilities: Delivering applied behavioral analytic interventions to children with Autism Spectrum Disorder and other developmental disorders that display aggressive or self-injurious behavior, conducting functional behavioral interviews with parents, training parents to implement behavioral interventions, recording and graphing clinical data.

Supervisor: F. Charles Mace, Ph.D., BCBA-D

9/08-7/09: Psychology Trainee

Center for Psychological Services. Marquette University, Milwaukee, MN.

Responsibilities: Administering, scoring, and writing reports for a full test battery for evaluation of intelligence, and personality for children and adults.

Supervisors: Alyson Gerdes, Ph.D.; John Grych, Ph.D.

WORK-RELATED CLINICAL EXPERIENCE

9/12-5/14, Clinical Assistant. Severe Behavior Disorder Program, Mailman Segal Center. Nova Southeastern University, Fort Lauderdale, FL.

Responsibilities: Delivering applied behavioral analytic interventions to children diagnosed with Autism Spectrum Disorders and other developmental disorders that display aggressive or self-injurious behavior, conducting functional behavioral interviews with parents, training parents to implement behavioral interventions, recording and graphing clinical data, developing and

implementing clinical protocols and treatment plans, mentoring and training practicum students.

Supervisor: F. Charles Mace, Ph.D., BCBA-D

5/03-5/06, Unit Coordinator. Tomorrow's Children, Waupaca, WI.

Responsibilities: Training and evaluation of unit staff, crisis management, supervision of behavioral programming, preparing unit schedule, monitoring client health needs, coordinating care with parents of clients and social workers, as well as executing the duties of a resident care worker.

Supervisor: Sarabeth Stielow, CSW

8/02-5/03, Resident Care Worker, Tomorrow's Children, Waupaca, WI.

Responsibilities: Maintaining supervision and conducting behavioral training of children and adolescents with internalizing and externalizing psychological disorders, dispensing medication and properly recording and updating records at a residential treatment center.

Supervisor: Sarabeth Stielow, CSW

TEACHING/TRAINING EXPERIENCE

Teaching

9/16-Present: Assistant Professor. Oregon Institute of Technology, Department of Humanities and Social Sciences. Klamath Falls, OR

Courses: PSY 201 Introduction to Psychology, PSY 334 and PSY 335 Behavior Modification I and II, PSY 434 Advance Behavior Modification

Responsibilities: Teaching applied behavior analysis and psychology classes to undergraduates using a combination of lectures, lab sections, online learning, and other modalities.

9/12-12/13: Graduate Teaching Assistant. Nova Southeastern University, Center for Psychological Studies. Fort Lauderdale, FL

Course: PSY 4414 Behavioral Principles of Learning.

Responsibilities: Assisting in weekly class preparations, facilitating classroom discussion, grading of testing and handling students' questions about the course and readings.

Instructor: F. Charles Mace, Ph.D., BCBA-D

5/12-8/12: Graduate Teaching Assistant. Nova Southeastern University, Center for Psychological Studies. Fort Lauderdale, FL

Course: ABA 780 Advanced Practicum in Applied Behavior Analysis I.

Responsibilities: Grading of student clinical portfolios and essays, facilitating online discussion forum, overseeing documentation of practicum hours.

Instructor: F. Charles Mace, Ph.D., BCBA-D

RESEARCH EXPERIENCE:

6/11-8/12: Graduate Research Assistant. Nova Southeastern University, Mailman Segal Center, Fort Lauderdale, FL.

Responsibilities: Implementing a novel protocol to increase compliance in young children diagnosed with Autism Spectrum Disorder, recording and analyzing data from research protocols, presenting research at professional conferences.

Supervisor: F. Charles Mace, Ph.D., BCBA-D

1/08–5/09: Graduate Research Assistant. Marquette University, Department of Psychology, Milwaukee, WI

Responsibilities: Administrating math tests under stereotype threat experimental manipulations, scoring and recording data, monitoring experiment for potential confounds, administrative duties.

Supervisor: Debra Oswald Ph.D.

5/01–4/02: Undergraduate Research Assistant. University of Minnesota, Institute of Child Development, Minneapolis, MN

Responsibilities: Recruiting and scheduling participants, transcribing and coding videotapes of experimental sessions.

Supervisor: Tara van Brederode

PRESENTATIONS/PUBLICATIONS

Benson, J., **Borgen, J.**, Cavanaugh, B., Lit, K., Trauschke, S., Shamlan, K., Sheehan, T., & Mace, F. C. (2013, May). *Cumulative record versus latency to first occurrence to analyze a response class hierarchy*. Poster presented at the 39th Annual Convention of the Association for Behavior Analysis International. Minneapolis, MN.

Benson, J., Lit, K., Trauschke, S., Shamlan, K., Sheehan, T., **Borgen, J.**, & Mace, F.C. (May, 2013, September). *Cumulative record versus latency to first occurrence to analyze a response class hierarchy*. *Extensions in empirical methods for assessment of severe problem behavior*. Symposium conducted at the annual meeting of the Florida Association for Behavior Analysis convention, Daytona Beach, FL.

Borgen, J., Lit, K., Sheehan, T., Benson, J., Cavanaugh, B., Cruz, Y., O'Brien, H., Trauschke, S., & Mace, F. C. (2013, May). *Measuring strength of the instruction-compliance contingency to determine instruction type to deliver*. In K. Shamlan (Chair), *Recent research on behavioral assessment and intervention*. Symposium conducted at the 39th Annual Convention of the Association for Behavior Analysis International. Minneapolis, MN.

Borgen, J., Mace, F. C., Shamlan, K., Cavanaugh, B., Lit, K., Benson, J., & Trauschke, S. (2016). *A stimulus control procedure produces rapid compliance to low-probability instructions*. *Journal of Applied Behavior Analysis*, In press.

Borgen, J., Sheehan, T., Benson, J., Cruz, Y., Lit, K., O'Brien, H., Trauschke, S., & Mace, F. C. (2012, May). *A stimulus control procedure produces rapid compliance to low-probability instructions*. Poster presented at the 38th Annual Convention of the Association for Behavior Analysis International. Seattle, WA.

Borgen, J., Tarver, D., Trauschke, S., Benson, J., Cavanaugh, B., Lit, K., & Mace, F. C. (2013, May). *Response class hierarchy analyses performed on twelve clients in an outpatient setting*. Poster presented at the 39th Annual Convention of the Association for Behavior Analysis International. Minneapolis, MN.

Borgen, J., Trauschke, S., Lit, K., Benson, J., Shamlan, K., & Mace, F. C. (2013, September). *Behavioral economics informed assessment of food reinforcer hoarding*. Paper presented at the 33rd Annual Convention of the Florida Association for Behavior Analysis. Daytona, FL.

Cavanaugh, B., Lit, K., Shamlan, K., Trauschke, S., Benson, J., **Borgen, J.**, Sheehan, T., Mace F. C. (2013, May). *Strength of the S-R contingency predicts the probability of compliance*

- to low-p instructions. Poster presented at the 39th Annual Convention of the Association for Behavior Analysis International. Minneapolis, MN.
- Goodin, C., Milnes, S. M., Kozisek, J. M., Lesser, A. D., **Borgen, J. G.**, Piazza, C. C., & Engler, C. W. (2016). *Teaching age-appropriate chewing skills in an adolescent male*. Poster presented at the 42nd Annual Convention of the Association for Behavior Analysis International, Chicago, IL.
- Kozłowski, A. M., **Borgen, J. G.**, & Masler, E. A. (2016). Validation of edible preference assessments and generalization of treatment protocols through free access meals. Manuscript in preparation.
- Lit, K., Benson, J., **Borgen, J.**, Cavanaugh, B., Shamlian, K., Sheehan, T., Trauschke, S., & Mace, F. C. (2013, May). *Linking reinforcer magnitude to response rate improves academic performance for children with autism*. Poster presented at the 39th Annual Convention of the Association for Behavior Analysis International. Minneapolis, MN.
- Lit, K., Mace, F. C., Sheehan, T., Benson, J., **Borgen, J.**, Cavanaugh, B., Trauschke, S. & Tarver, D. (2014, May). Correlating reinforcer magnitude and response rate to assess the operant component of inattention. In L. J. Cooper-Brown (Chair), *Extensions in empirical methods of behavioral assessment*. Symposium conducted at the 40th Annual Convention of the Association for Behavior Analysis International. Chicago, IL.
- Masler, E. A., **Borgen, J. G.**, & Kozłowski, A. (2016). *Generalization of mealtime protocols through free access meals with preferred vs. non-preferred foods*. Poster presented at the 42nd Annual Convention of the Association for Behavior Analysis International. Chicago, IL.
- Milnes, S. M., **Borgen, J. G.**, Lesser, A., D., Kozisek, J. M., Piazza, C. C. (2016). Teaching appropriate chewing using a prompting procedure in an adolescent with autism. Manuscript in preparation.
- Trauschke, S., Benson, J., **Borgen, J.**, Cavanaugh, B., Lit, K., Shamlian, K., Sheehan, T., & Mace, F. C. (2013, May). *Effects of a reflexive conditioned motivating operation on evocation of SIB, aggression, and disruptive vocalizations*. Poster presented at the 39th Annual Convention of the Association for Behavior Analysis International. Minneapolis, MN.
- Trauschke, S., **Borgen, J.**, Sheehan, T., Lit, K., Benson, J., O'Brien, H., Cruz, Y., Boules, I., and Mace, F. C. (2012, September). *Behavioral assessment of the strength of the S-R contingency and the probability of compliance to low-p instructions*. Symposium presented at the 32nd Annual Meeting for the Florida Association for Behavior Analysis. Jacksonville, FL.
- Trauschke, S., Shamlian, K., Boules, I., **Borgen, J.**, Cavanaugh, B., & Mace, F. C. (May, 2014). Assessment of signaled transitions as a reflexive conditioned motivating operation. In L. J. Cooper-Brown (Chair), *Extensions in empirical methods of behavioral assessment*. Symposium conducted at the 40th Annual Convention of the Association for Behavior Analysis International. Chicago, IL.
- Trauschke, S., Shamlian, K., Boules, I., **Borgen, J.**, & Mace F. C. (2013, September). Assessment of signaled transitions as a reflexive conditioned motivating operation. *Extensions in empirical methods for assessment of severe problem behavior*. Symposium conducted at the annual meeting of the Florida Association for Behavior Analysis

convention, Daytona Beach, FL.

REFERENCES

Available upon request

Maria Lynn Kessler

Department of Humanities and Social Sciences
 Oregon Institute of Technology
 27500 SW Parkway Ave.
 Wilsonville, OR 97070
 (503) 821-1308
 Marialynn.kessler@oit.edu

EDUCATION

Ph.D. December 1994 Psychology - Cognitive and Behavioral Sciences
 Florida State University, Tallahassee, FL
 Major Professor: Jon S. Bailey, PhD
 Dissertation: Evaluating the impact of feedback about tips on waiter performance

M.S. December 1989 Behavior Analysis and Therapy
 Southern Illinois University-Carbondale, Carbondale, IL
 Thesis: Evaluation of a program to train caseworkers to conduct goal-directed visitation

B.S. June, 1983 Psychology, Cum Laude
 Northeastern University, Boston, MA

Awards and Honors

Faculty Achievement Award	Psi Chi Honor Society
Faculty Alumni Engagement Award	Avrom Aaron Leve Award
Phi Kappa Phi Honor Society	Joseph P. Grosslight Teaching Award
Cooperative Education Award	Krause Undergraduate Teaching Award

PROFESSIONAL POSITIONS

Teaching Experience

2010-Present PROFESSOR
 2005-2010 ASSOCIATE PROFESSOR
 2002-2005 ASSISTANT PROFESSOR
 Oregon Institute of Psychology

Full responsibility for undergraduate classes including: Behavior Modification, Learning Theories, Performance Management, Research Methods, Organizational Psychology, Industrial Psychology, General Psychology, Human Growth and Development; Undergraduate Advising; Mentoring Undergraduate Research; Faculty Advisor - Psi Chi Honor Society; Participation on Campus Committees. Program Director for Applied Psychology-Wilsonville and Applied Behavior Analysis programs.

1997 -2002 ASSISTANT PROFESSOR
 1996 - 1997 VISITING FACULTY
 The Citadel, Charleston, S. C.

Full responsibility for undergraduate and graduate classes including: Industrial & Organizational Psychology, Psychology of Individual Behavior, Human Growth and Development, General Psychology, Application of Learning Theories, and First Year Seminar; Co-Taught Performance Management, Human Resource Management; Undergraduate Advising; Mentoring Undergraduate Research; Faculty Advisor - Psi Chi Honor Society; Participation on Campus Committees; Supervising Graduate Research.

1994 - 1995 INSTRUCTOR
 University of Judaism, Department of Psychology, Los Angeles, CA

Full responsibility for undergraduate psychology class in Testing and Measurement. Co-taught undergraduate class in Experimental Psychology and Applied Behavior Analysis

1990 - 1994 GRADUATE ASSISTANT
 Florida State University, Psychology Department, Tallahassee, FL

Full responsibility for teaching introductory level psychology courses in general psychology and Applied Behavior Analysis. Assisted in teaching graduate level class in teaching psychology

1988 TEACHING ASSISTANT
 Southern Illinois University-Carbondale, Behavior Analysis and Therapy

CV/mlk |

Program, Carbondale, IL

Assisted in curriculum development, grading tests and assignments, and class lectures for undergraduate introduction to behavior analysis class

Other Experience

1996 EDUCATION COORDINATOR/GRANT WRITER
The Parent Connection, Tucson, AZ

Coordinate center-based and outreach programs for a non-profit, family resource and support center. Responsible for supervision of parent educators, coordination of programs, parenting classes, and outreach events. Prepare monthly and quarterly reports and coordinate evaluation efforts. Responsible for grant writing.

1995 PROGRAM EVALUATOR / VOLUNTEER
The Parent Connection, Tucson, AZ

Develop and supervise implementation of a comprehensive program evaluation for agency that provides a variety of parent support and educational services. Assist in development and implementation of research projects. Assist with grant writing.

1994 - 1995 PROGRAM MANAGER
Project SafeCare, Department of Psychology, University of Judaism,
Los Angeles, CA

Responsible for day-to-day operation of research project involved in areas of health, safety, and parent-child interactions with parents involved in or at-risk for child abuse and neglect.

1990 - 1994 BEHAVIOR ANALYST /CONSULTANT
Behavior Management Consultants, Inc., Tallahassee, FL
Supervisor: Maxin Reiss, PhD

Provided in-school behavioral consultation and programming for elementary school children in regular education classrooms

Provided consultation and supervision to an Intermediate Care Facility serving adults with developmental disabilities. Focused on implementation and creation of skill acquisition programs and implementation of monitoring systems to ensure quality of services

Trained staff at various Intermediate Care Facilities in Florida to provide skill acquisition training for adults with developmental disabilities; reviewed and revised training programs

1993 - 1994 BEHAVIOR ANALYST
Children's Home Society - TreeHouse Shelter, Tallahassee, FL
Supervisor: Maxin Reiss, PhD

Provided behavioral consultation including systems analysis, program development, and individualized behavior programs for children's shelter for children (6 mos - 11 yrs) temporarily removed from their families

1992-1993 BEHAVIOR ANALYST
Apalachee Center for Human Services/Taylor Tech Institute Adolescent Day
Treatment Program
Supervisor: Maxin Reiss, PhD

Provided in-school behavioral consultation and programming for adolescent SED classroom

1992 - 1993 BEHAVIOR ANALYST
Leon County School Board, Tallahassee, FL
Supervisor: Maxin Reiss, PhD

Provided in-school behavioral consultation and programming for elementary school student in Varying Exceptionalities classroom

1990 - 1993 BEHAVIORAL CONSULTANT / PARENT TRAINER
Psychological and Family Consultants, Inc. Tallahassee, FL
Supervisor: Charles Madsen, PhD

Conducted in-home assessments, designed and implemented treatment protocols to improve parenting skills, and monitored client progress through data collection

1990 - 1992 BEHAVIOR ANALYST
Liberty Intermediate Care Facility, Bristol, FL
Supervisor: Maxin Reiss, PhD

Provided consultation and supervision to an Intermediate Care Facility serving adults with developmental disabilities; focused on implementation and creation of skill acquisition programs

CV/mlk 2

1989 - 1990 **BEHAVIOR SPECIALIST**
 Developmental Services, Tallahassee, FL
 Supervisor: Jon S. Bailey, PhD
 Conducted in-home assessments, designed and implemented treatment/training protocols, and monitored progress through data collection, with children and adults with developmental disabilities and mental retardation

1988 - 1989 **FOSTER PARENT TRAINER**
 Illinois Department of Children & Family Services, Marion Region, Marion, IL
 Developed and conducted workshops on child and adolescent development for foster parents

1988 - 1989 **PARENT EDUCATOR**
 Parents That Care, Carbondale, IL
 Assisted in conducting 8-week parent training course for voluntary participants

1987 - 1989 **COUNSELOR**
 Project 12-Ways, Carbondale, IL
 Supervised team of Graduate Assistants; conducted in-home assessments; designed and implemented treatment protocols; and monitored client progress through data collection for in-home eco-behavioral program for families referred for child abuse and neglect

1987 **GRADUATE ASSISTANT**
 Project 12-Ways, Carbondale, IL
 Conducted in-home assessments; designed and implemented treatment protocols; and monitored client progress through data collection for in-home eco-behavioral program for families referred for child abuse and neglect

1985 - 1987 **RESEARCH ASSISTANT**
 Southern Illinois University-Carbondale, Carbondale, IL
 Assisted in development and data collection of research project to train health care skills to adults with developmental disabilities

1985 - 1987 **INDEPENDENT LIVING SKILLS SPECIALIST**
 Evaluation & Developmental Center, Carbondale, IL
 Trained independent living skills, developed curriculum, and monitored progress, in program for adults with developmental disabilities, mental retardation, behavior disorders, mental illness, and/or traumatic brain injury

1984 - 1985 **HOUSE MANAGER**
 Communities for People, Boston, MA
 Supervised house staff, planned and supervised client activities, and managed house budget in group home for adolescents referred by the Department of Social Services

1983 - 1984 **HOUSE COUNSELOR**
 Communities for People, Boston, MA
 Planned and supervised client activities in group home for adolescents referred by the Department of Social Services

1982 **INTERMEDIATE TREATMENT COUNSELOR**
 Kent County Council Social Services, Chatham, Kent, England
 Designed program on special issues for adolescent girls; assisted in organizing and implementing programs for a variety of groups in community program for disadvantaged, pre-delinquent, and delinquent youth

1981 **RESEARCH ASSISTANT**
 Liberty Mutual Research Center, Hopkinton, MA
 Conducted literature search and review, compiled annotated bibliography; collected data for driving research; assisted in data analysis

1980 **VOCATIONAL COUNSELOR AIDE**
 Jobs For Youth/Boston, Boston, MA
 Assessed employability, provided job readiness counseling, job placement and follow-up counseling; and interacted with community agencies on behalf of high-school drop-outs

PROFESSIONAL ORGANIZATIONS
 Association for Behavior Analysis International
 Association for Professional Behavior Analysts
 Oregon Association for Behavior Analysis; Vice President 2012-2016
 Western Psychological Association
 Capital Area Chapter of the Florida Association for Behavior Analysis
 Served as Vice President: 1993 - 1994

CV/mlk 3

Assistant Conference Director

Illinois' Children in Foster Placement: Issues and Innovations for Visitation and Foster Parenting, Spring Conference/Retreat of the Behavior Analysis Society of Illinois, Carbondale, IL; 1987
The Use of Restrictive Behavior Management Procedures: What is the Prudent Course for Illinois?, Spring Conference/Retreat of the Behavior Analysis Society of Illinois, Carbondale, IL; 1986

HONOR SOCIETIES

Psi Chi
The Honor Society of Phi Kappa Phi

COMMITTEES, COMMISSIONS, BOARDS

Oregon Tech

Promotion Advisory Committee, member 2012-present
General Education Review Task Force, member 2013 - 2016
Assessment Executive Commission, member 2005 - 2016; chair 2006/2007 - 2013
General Education Advisory Council, , member 2008 - 2013
Graduate Council, member 2011 - present
Curriculum and Planning Commission, , member, 2004/2005 - 2010
Rank, Tenure, and Promotion, Member 2003/2004 - 2013, 2014/2015; Chair 2007/08- 2008/2009
Psi Chi Faculty Advisor, 2003/2004 - 2014
Program Reduction and Elimination Committee (PREC), member, 2008
Psychology Dept. Faculty Search Committee, Member, 2003/04 2008/09, 2009/10, 2010/11, 2013/14, 2014/15
Psychology Dept. Faculty Search Committee, Chair, 2004/05, 2012/13, 2013/14
Psychology Club Co-Advisor, 2003/2004 - 2014
Institutional Review Board, Member 2003/2004, - 2006/2007
Campus Health Action on Tobacco Study Campus Advisory Board, OIT, Member, 2003/2004, 20004/2005

Community

Oregon Healthcare Workforce Committee, Member 2016 - present
Oregon Association for Behavior Analysis (ORABA), member, Vice President 2012-2016, Board Advisor 2016-present
Klamath County Commission on Children and Families, Advisory Board, Member April 2008 - 2013; chair 2011-2013
Transformations Wellness Center, Board of Directors, chair, April-August, 2007, member, 2010 - March 2014
Klamath Family Partnership, Academic Liaison, member Partners for Change sub-committee, 2005/06, 2006/07
Klamath County Youth Care Center (YCC) Peer Review, March 2006 - October 2007

Other

Psi Chi Faculty Advisor, The Citadel Chapter, 1997/98, 1999/2000, 2000/2001, 2001/2002
Psych. Bowl Coach, The Citadel, 1997, 1998, 1999, 2000, 2001
Curriculum and Instruction Committee, The Citadel, Chair, 1998/99, 1999/2000, 2000/2001
Student Affairs Committee, The Citadel, Member, 1997/98, 1998/99, 1999/2000
Computer Services Committee, The Citadel, Member, 1999/2000, 2000/2001
Awards and Post-Graduate Scholarship Committee, The Citadel, Member, 2000/2001
Undergraduate Program Committee, Psychology Department, The Citadel, 1997 - present

GRANTS

Kessler, M. L. (2016). Supervised practicum in ABA: Building Oregon's autism behavioral health workforce through university-industry partnerships. (\$182,177) Oregon Talent Council.
Saylor, C. F.(P.I.) and Kessler, M. L. (co-investigator) (2000). Cost-effective systems to enhance social and recreational skills of youth with disabilities: Pilot research for PEER Express. (\$64,200) South Carolina Research Initiative Grants.
Kessler, M. L. (2000). Improving the Safety of a Hotel Shuttle Service using Training and Customer Feedback (\$2,760) The Citadel Development Foundation.

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- Kessler, M. L. (1999). Implementation and evaluation of the HAPI and CLEAN programs. (\$1660) The Citadel Development Foundation.
- Kessler, M. L. (1997). Training private social service agency workers to implement a home safety and cleanliness program with neglectful families. (\$1500) The Citadel Development Foundation.

EDITORIAL SERVICE

- Editorial Board, *Journal of Organizational Behavior Management*, 2002- present
- Guest Reviewer, *Education and Treatment of Children*, 2015
- Guest Reviewer, *Journal of Organizational Behavior Management*, 1999, 2001
- Guest Reviewer, *Journal of Applied Behavior Analysis*, 1986, 1987, 1988

PROFESSIONAL PRESENTATIONS

- Bailey, S., Kessler, M. L., & Torres, T. (2016). Tales of a Gen Ed reform: What we learned along the way and how it might inform your process. Presentation at 56th annual conference of the Association for General and Liberal Studies, Salt Lake City, UT, September 29-October 1, 2016.
- Kessler, M. L. (2016). Development and use of guided lecture notes in an online class. Poster presentation at Oregon Tech Excellence in Teaching Conference, September 19, 2016.
- Kessler, M. L., Petersen, T. P., & Sleep, M. (2016). Technology in teaching. Panel presentation at Oregon Tech Excellence in Teaching Conference, September 19, 2016.
- Kessler, M. L., Austin, A. K., & Fischer, J. (2015). Navigating the Certification Process. Panel Presentation at Oregon Association for Behavior Analysis Quarterly Meeting, Wilsonville, OR, July 11, 2015.
- Kessler, M. L., Austin, A. K., & Fischer, J. (2014). Navigating the Certification Process. Panel Presentation at Oregon Association for Behavior Analysis Quarterly Meeting, Tualatin, OR, June 28, 2014.
- Kessler, M. L., Austin, A. K., & Fischer, J. (2013). Navigating the Certification Process. Panel Presentation at Oregon Association for Behavior Analysis Quarterly Meeting, Tualatin, OR, September 7, 2013.
- Kessler, M. L. (2011). Facilitating transitions from classroom to hands-on learning. Presentation at Radiological Sciences Clinical Externship Workshop, Klamath Falls, OR, May 14, 2010
- Kessler, M. L. (2010). Helping the student transition from classroom to Clinical- Part II. Presentation at Radiological Sciences Clinical Externship Workshop, Klamath Falls, OR, May 13, 2011.
- Kessler, M. L. (2010). Applied Psychology Program at OIT. Presentation at Oregon Association for Behavior Analysis Quarterly Meeting, Klamath Falls, OR, January 15, 2010.
- Kessler, M. L. (2009). Introductory psychology and reading comprehension. Poster presented at the 89th Annual Convention of the Western Psychological Association, Portland, OR, April 23-26, 2009.
- Axtell, A., Gilman, H., Noble, L., and Kessler, M. L. (2009). Attitudes toward cell phone use on campus. Poster presented at the 89th Annual Convention of the Western Psychological Association, Portland, OR, April 23-26, 2009.
- Larch, M. L and Kessler, M. L. (2009) Gender and conformity. Poster presented at the 89th Annual Convention of the Western Psychological Association, Portland, OR, April 23-26, 2009.
- Rusth, G. J. and Kessler, M. L. (2009). The correlation between diagnosed ADHD and early childhood trauma. Poster presented at the 89th Annual Convention of the Western Psychological Association, Portland, OR, April 23-26, 2009
- Stringer, J. B. and Kessler, M. L. (2009). Effects of informational prompts on energy conservation in college classrooms, a replication. Poster presented at the 89th Annual Convention of the Western Psychological Association, Portland, OR, April 23-26, 2009.
- Laurin, C. A and Kessler, M. L. (2008). Attempted detection of factitious behavior online by text analysis. Poster presented at the 88th Annual Convention of the Western Psychological Association, Irvine, CA, April 10-13, 2008.
- Stephens, R., Loustalet, J., and Kessler, M. L. (2008). College students with disabilities' perceptions of disability services. Poster presented at the 88th Annual Convention of the Western Psychological Association, Irvine, CA, April 10-13, 2008.
- Cornacchione, H., Cox, J, Kessler, M. L., Torres, J., and Usher, K. (2007). WebCT hybrid classes. Workshop presented at OIT's 4th Annual Showcase on Teaching, Klamath Falls, OR, September 18, 2007.

CV/mlk 5

- Trujillo, D. and Kessler, M.L. (2007). Backward chaining: Teaching technique for takedowns in wrestling. Poster presented at the 87th Annual Convention of the Western Psychological Association, Vancouver, BC, Canada, May 3-6, 2007.
- Kessler, M.L. (2007). Evaluation of computerized adaptive instruction of Psychology on reading comprehension. Poster presented at the 87th Annual Convention of the Western Psychological Association, Vancouver, BC, Canada, May 3-6, 2007.
- Arauz, K., Kessler, M. L., and Ross, A. L. (2006). Operationalizing the MIM for Assessment of Attachment Disorder. Poster presented at the 86th Annual Convention of the Western Psychological Association, Portland, OR, April 27 - 30, 2006.
- Brandner, K. and Kessler, M. L. (2006). A single-case study of a smoking cessation plan. Poster presented at the 86th Annual Convention of the Western Psychological Association, Portland, OR, April 27 - 30, 2006.
- Kessler, M. L., Hancock, J., Baker, L., and Duchi, A. (2006). Reading placement scores and academic performance of college freshmen. Poster presented at the 86th Annual Convention of the Western Psychological Association, Portland, OR, April 27 - 30, 2006.
- Trujillo, D. and Kessler, M. L. (2006). The use of backward chaining in teaching wrestling takedowns. Poster presented at the 86th Annual Convention of the Western Psychological Association, Portland, OR, April 27 - 30, 2006.
- Clark, B., Rogers, B., Albert, A., and Kessler, M. L. (2005). Sharing teaching tips: Ideas to inspire and support faculty at OIT. Workshop/discussion presented at OIT's 2nd Annual Showcase on Teaching, Klamath Falls, OR, September 22, 2005.
- Markus, A., Porter, J., Naseth, G., and Kessler, M.L. (2005). Effects of I'm Going to College: A 6th grade intervention. Poster presented at the 85th Annual Convention of the Western Psychological Association, Portland, OR, April 14-17, 2005.
- Porter, J., Markus, A., Naseth, G., and Kessler, M.L. (2005). I'm going to college: A parent's perspective. Poster presented at the 85th Annual Convention of the Western Psychological Association, Portland, OR, April 14-17, 2005.
- Coons, M. L., Kessler, M. L., and Taylor, K. (2005). Use of social story to improve clean-up time. Poster presented at the 85th Annual Convention of the Western Psychological Association, Portland, OR, April 14-17, 2005.
- Schmidt, J. A., Skidgell, K., Weisenburgh, J., and Kessler, M. L. (2005). Cashier behaviors and customer satisfaction at the Home Depot. Poster presented at the 85th Annual Convention of the Western Psychological Association, Portland, OR, April 14-17, 2005.
- Weisenburgh, J. and Kessler, M. L. (2004). Silver Ribbon Pilot Study. Poster presented at the 84th Annual Convention of the Western Psychological Association, Phoenix, AZ, April 22-25, 2004.
- Kennedy, T., Frei, P., Naseth, G. J., Yanasaki, G., Kessler, M. L. and Koon, J. (2004). I'm Going to College: A Program for Sixth Graders. Poster presented at the 84th Annual Convention of the Western Psychological Association, Phoenix, AZ, April 22-25, 2004.
- Kennedy, T., Neal-Robo, J., Konkolewski, T., Fleming, R., and Kessler, M. L. (2004). Influencing Customer Behavior through Manipulation of Environmental Cues. Poster presented at the 84th Annual Convention of the Western Psychological Association, Phoenix, AZ, April 22-25, 2004.
- Kessler, M. L. (Discussant) (May 2003). Behavioral Consulting in Education: Applications from the Field. Symposium presented at the 29th Annual Convention of the Association for Behavior Analysis, San Francisco, CA.
- Cowart, B., Kessler, M. L. and Saylor, C. (May, 2003). The Behavioral Observation of Social Skills in Play and Leisure Activities (BOSS-PLA): Reliability and Validity. Poster presented at the 29th Annual Convention of the Association for Behavior Analysis, San Francisco, CA.
- McMillan, S., Kessler, M. L. and DeRoma, V. M (May, 2003). Preliminary Exploration of Child Welfare Decision Making. Poster presented at the 29th Annual Convention of the Association for Behavior Analysis, San Francisco, CA.
- Kessler, M. L. (May, 2003). Assessment of Critical Thinking about Psychology. Poster presented at the 29th Annual Convention of the Association for Behavior Analysis, San Francisco, CA.
- Kessler, M. L. (May 2002). Assessing the Impact of Introductory Psychology on Critical Thinking. Poster presented at the 28th Annual Convention of the Association for Behavior Analysis, Toronto, Ontario, Canada.

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- DeRoma, V., Kessler, M. L. and Darden, A. (May, 2002). Classroom Research: A Community Effort. Poster presented at the Second Annual Charleston Connections: Innovations in Higher Education Conference, Charleston, S.C.
- Kessler, M. L. (March 2002). CASTLE: Citadel Style. Poster presented at 2002 Carnegie Academy for the Scholarship of Teaching and Learning (CASTL) Reunion. Chicago, IL.
- Kessler, M. L., Jones, R. S., Matthews, T. D., DeRoma, V., and Lipovsky, J. (June, 2001). Evaluating Critical Thinking in an Introductory Psychology Course. Paper presented at the First Annual Charleston Connections: Innovations in Higher Education Conference, Charleston, S.C.
- DeRoma, V. M, Blackall, J., Kessler, M. L., Lipovsky, J., and Lassiter, K. (June, 2001). Tolerance for Ambiguity and Affinity to Course Structure. Symposium presented at the First Annual Charleston Connections: Innovations in Higher Education Conference, Charleston, S.C.
- Kessler, M. L., Jones, R. S. and Matthews, T.D. (April, 2001). Perspectives on Critical Thinking in the Classroom. Pre-conference workshop presented at the South Carolina Psychological Association Spring Conference, Myrtle Beach, S.C.
- Kessler, M. L. (March, 2001) Undergraduate Research Opportunities. Paper presented at a Symposium at the South Eastern Psychological Association Annual Meeting, Atlanta, GA.
- Kessler, M. L. and McMillan, S. (May, 2000). Training caseworkers to address home safety and cleanliness with neglectful families. Poster presented at the 26th Annual Convention of the Association for Behavior Analysis, Washington, D. C.
- Kessler, M. L., Lusk, S., Armour, G., and Houston, J. T. (May, 2000). The effects of electronic feedback on recycling on a college campus. Poster presented at the 26th Annual Convention of the Association for Behavior Analysis, Washington, D. C.
- Kessler, M. L. and Sinisi, C. (October 1999). Experiential Learning: Making the Most of Your College Career. Presentation at the South Carolina Psychological Association Academic Day, Columbia, S. C.
- Kessler, M. L. (April, 1999). Student Involvement in Real-World Projects: A Model. Presented at the 1999 meeting of the Association for Business Communication, Southeastern United States, Charleston, S.C.
- Kessler, M. L. (February, 1999). HAPI and CLEAN: An Objective and Valid Protocol for Working with Neglectful Families. Workshop presented at The Fifth Annual South Carolina Professional Colloquium on Child Abuse, Charleston, S.C.
- Faulk, O. J., Kessler, M. L., Maldonado, S. D., and Guerra, E. M. (October, 1998). The Effects of Cues and Prompts on the Recycling Behaviors of a College Campus. Poster presented at the 18th Annual Meeting of the Florida Association for Behavior Analysis, Daytona Beach, FL. Best Poster Session Award.
- Kessler, M. L., Shoemaker, O. S., and Hamlin, K. (May, 1998). Impact at Home: Evaluation of the Generalization Effects of a Day Treatment Program. Poster presented at the 24th Annual Convention of the Association for Behavior Analysis, Orlando, FL.
- Kessler, M. L. and Nagy, K. (May, 1998). Training Private Social Service Agency Workers to Implement a Home Safety and Cleanliness Program with Neglectful Families. Poster presented at the 24th Annual Convention of the Association for Behavior Analysis, Orlando, FL.
- Faulk, O. J., Kessler, M. L., Maldonado, S. D., and Guerra, E. M. (April, 1998). The Effects of Cues and Prompts on the Recycling Behaviors of a College Campus. Poster presented at the Annual Conference of the South Carolina Psychological Association, Myrtle Beach, SC.
- Briggs, K. and Kessler, M. L. (October, 1997). Multimedia Resources for the Teaching of Psychology. Workshop presented at the South Carolina Psychological Association Academic Day, Columbia, S. C.
- Swenson, C. C. and Kessler, M. L. (December, 1996). Successful foster parenting for special needs children. Workshop presented to Mentor, Charleston, SC.
- Harris, G. and Kessler, M. L. (June 1996). Effective parent teacher conferences and behavior management with at-risk children. Workshop presented to CODAC Behavioral Health Services, Inc. Early Childhood Education Center, Tucson, AZ.
- Kessler, M. L. (March, 1996). Improving teacher-parent communication. Presented at Spring Conference of the Association for Children, Youth, and Families, Tucson, AZ.
- Harris, G. L., Kessler, M. L., Ortiz, M. E. (January, 1996). Strategies for working with families. Presented at 1996 National Child Abuse Prevention Conference, Tucson, AZ.
- Taub, H.B., Kessler, M. L., and Lutzker, J. R. (June, 1995). Teaching neglectful families to identify and address environmental and health-related risks. Paper presented at a symposium at the Third National Colloquium of the American Professional Society on the Abuse of Children, Tucson, AZ.

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- Kessler, M. L., Bigelow, K. M., and Lutzker, J. R. (June, 1995). Improving the parent-child relationship in abusive and neglectful families. Paper presented at a symposium at the Third National Colloquium of the American Professional Society on the Abuse of Children, Tucson, AZ.
- Kessler, M. L., Bigelow, K. M., Lutzker, J. R., and Doctor, R. M. (May, 1995). Evaluation of the safety and bonding training components of Project SafeCare: Preliminary findings. Paper presented at a symposium at the 21st Annual Conference of the Association for Behavior Analysis, Washington, D.C.
- Taub, H. B., Kessler, M. L., and Lutzker, J. R. (May, 1995). H.E.A.L.T.H.: Evaluation of a home-based video training program for parents at risk of child abuse and neglect. Paper presented at a symposium at the 21st Annual Conference of the Association for Behavior Analysis, Washington, D.C.
- Bigelow, K. M., Kessler, M. L., Doctor, R. M., and Lutzker, J. R. (May, 1995). Assessing families at risk of child abuse and neglect. Paper presented at a symposium at the 21st Annual Conference of the Association for Behavior Analysis, Washington, D. C.
- Lutzker, J. R., Kessler, M. L., and Doctor, R. M. (February, 1995). Project SafeCare: Teaching safety, health skills and bonding to prevent child abuse. An invited address at the Fourteenth Annual Conference of the Northern California Association for Behavior Analysis, Oakland, CA.
- Lutzker, J. R., Kessler, M. L., and Doctor, R. M. (November, 1994). Project SafeCare: Health, safety, and bonding with high-risk parents. Paper presented at University of Judaism/Project SafeCare Conference, "Research and Treatment in Child Abuse and Neglect", Los Angeles, CA.
- Kessler, M. L., Wagner, K., and Reiss, M. L. (September, 1994). Providing consultative behavioral services to develop and maintain a therapeutic environment in an emergency children's shelter. Paper presented at the 14th Annual Meeting of the Florida Association for Behavior Analysis, Orlando, FL.
- Reiss, M. L., Taylor, C.C., Kessler, M. L., and Austin, J. (September, 1994). The behavior analyst as a consultant to the elementary public school setting. Paper presented at the 14th Annual Meeting of the Florida Association for Behavior Analysis, Orlando, FL.
- Kessler, M. L. (September, 1993). Improving waiter performance using graphic feedback on tips. Paper presented at a symposium at the 13th Annual Meeting of the Florida Association for Behavior Analysis, Ft. Lauderdale, FL.
- Kessler, M. L. and Austin, J. (September, 1992). Decreasing unsafe roofing behavior using feedback and incentives. Paper presented at a symposium at the 12th Annual Meeting of the Florida Association for Behavior Analysis, Orlando, FL.
- Riccobono, J. E., Austin, J., Kessler, M. L., and Bailey, J. S. (May 1992). P.M. on top: How to increase your competitiveness and profit margin in the roofing industry. Paper presented at the 18th Annual Convention of the Association for Behavior Analysis, San Francisco, CA.
- Zugazaga, C., MacMillan, S., Mozingo, D., and Kessler, M. L. (1990). Passive behavior modification: The elimination of spitting behavior in a dual diagnosed hepatitis-B carrier as a function of the non-contingent administration of gum. Poster presented at the 10 anniversary meeting of the Florida Association for Behavior Analysis, Orlando, FL.
- Chung, W.S., Kichline, D.L., Kessler, M.L., Norman, R.K., Corsi, E.S., Sveinsson, E.M., Allison, P.A., Gould, E.J., & Greene, B.F. (1990, May). Attendance Contract: Is it simply a piece of paper? Poster session presented at the annual meeting of the Association for Behavior Analysis, Nashville, Tennessee.
- Kessler, M. L. and Greene, B. F. (May 1989). Conducting goal-directed visitation between natural parents and their children in foster care: Development and evaluation of the training system. Paper presented at a symposium at the Fifteenth Annual Convention of the Association for Behavior Analysis, Milwaukee, WI.
- Harrison, R. J., Kessler, M. L., and Greene, B. F. (May 1989). Conducting goal-directed visitation between natural parents and their children in foster care: Development and evaluation of the caseworker performance management system. Paper presented at a symposium at the Fifteenth Annual Convention of the Association for Behavior Analysis, Milwaukee, WI.
- Kessler, M. L., Pham, T., Cowley, B. J., and Greene, B. F. (May 1989). "Beat the bell": Using an avoidance procedure to train praise statement. Poster presented at the Fifteenth Annual Convention of the Association for Behavior Analysis, Milwaukee, WI.
- Lynch, D., Cowley, B. J., Pham, T., Kessler, M. L., Greene, B. F. (May 1989). Training "parental bonding". Poster presented at the Fifteenth Annual Convention of the Association for Behavior Analysis, Milwaukee, WI.
- Kessler, M.L., Koehner, M. and Norman, R. (June, 1988). Structuring goal-oriented visitation with the child welfare team. Workshop presented at 1988 Illinois Department of Children & Family Services Marion Region Conference, Mt. Vernon, IL.

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- Lynch, D.C., Kessler, M.L., O'Neal, S.T. and Greene, B.F. (October, 1988). Treatment Success: Myopia in reacting to client change. Paper presented at a symposium at the Fourth Annual Conference of the Behavior Analysis Society of Illinois, Lisle, IL.
- Pham, T.M., Kessler, M.L. and Greene, B.F. (1988). Can you solve this problem?: Training a neglectful client to create a stable home environment. Poster presented at the Fourth Annual Conference of the Behavior Analysis Society of Illinois, Lisle, IL.
- Kessler, M.L., Pham, T.M., Lynch, D.C., Greene, B.F. and Wesch, D.W. (May, 1988). Ecobehavioral treatments: Relation between length of prior social service and treatment outcomes. Poster presented at the Fourteenth Annual Convention of the Association for Behavior Analysis, Philadelphia, PA.
- Lubeck, R.C., Kessler, M.L. and Montes, A.M. (May, 1988). A comparison of parent-child interactions with abusive, neglectful and non-abusive families. Poster presented at the Fourteenth Annual Convention of the Association for Behavior Analysis, Philadelphia, PA.
- Montes, A.M., Kessler, M.L., and Lynch, D.C. (May, 1988). Positive Child Management. Workshop presented to Illinois Department of Children and Family Services Foster Parents, Marion, IL.
- Kessler, M.L., Greene, B.F., Carey, S.P., Norman, R., Hoover, N.S., and Allen, J. (November, 1987). Reuniting families: A goal-directed system of visitation for natural parents and their children in foster placement. Paper presented at a symposium at the Third Annual Conference of the Behavior Analysis Society of Illinois, Champaign, IL.
- Lubeck, R.C., Garrett, K., Hernandez, M., and Kessler, M.L. (October, 1987). Child behavior management: Techniques of positive management. Workshop presented at Benton Day Care Center, Benton, IL.
- Davis, P.K., Cuvo, A.J., Wilson, P., Faw, G.D., Kessler, M.L., and Kyle, M. (May, 1987). Teaching a complex health care skill: How to self-treat minor injuries and when and how to seek medical attention. Poster presented at the Thirteenth Annual Convention of the Association for Behavior Analysis, Nashville, TN.
- Kessler, M.L., Greene, B.F., Norman, R. and Hoover, N.S. (April, 1987). V.I.P.: Visitation Intervention Program. Paper presented at the 1987 Illinois Department of Children and Family Services All Workers Conference, Schaumburg, IL.
- Cuvo, A.J., Davis, P.K., Faw, G.D., Wilson, P., Boitos, T., Kyle, M. and Kessler, M.L. (May, 1986). A behavioral strategy for teaching health care to rehabilitation clients: Self-treatment and emergency recognition. Paper presented at an invited symposium at the Twelfth Annual Convention of the Association for Behavior Analysis, Milwaukee, WI.

MANUSCRIPTS & PUBLICATIONS

- DeRoma, V. M, Kessler, M. L., McDaniel, R., and Ceasar, M. (2005). Important risk factors in home-removal decisions: Social caseworker perceptions. *Child and Adolescent Social Work Journal*, 23(3), 263-277.
- DeRoma, V. M., Martin, K. M. and Kessler, M. L. (2003). The relationship between tolerance for ambiguity and need for course structure. *Journal of Instructional Psychology*, 30, 104 - 109.
- Kessler, M. L. (2001). Transitioning from Maintenance to Institutionalization: Critical Additions to the Boyce and Geller Analysis. *Journal of Organizational Behavior Management*, 21(1), 71 - 73.
- Kessler, M. L. and Greene, B. F. (1999). Behavior analysis in child welfare: Competency training caseworkers to manage visits between parents and their children in foster care. *Research on Social Work Practice*, 9(2), 148 - 170.
- Lutzker, J. R., Bigelow, K. M., Swenson, C. C., Doctor, R. M., and Kessler, M. L. (1999). Problems related to child abuse and neglect. In S. Netherton, C. E. Walker, and D. Holmes (Eds.) *Comprehensive Textbook of Child and Adolescent Disorders*. Oxford University Press: Oxford.
- Lutzker, J. R., Bigelow, K. M., Doctor, R. M., and Kessler, M. L. (1998). Safety, health care, and bonding within an ecobehavioral approach to treating and preventing child abuse and neglect. *The Journal of Family Violence*, 13, 163 - 185.
- Lutzker, J. R., VanHasselt, V. B., Bigelow, K. M., Greene, B. F., and Kessler, M. L. (1998). Child abuse and neglect: Behavioral research, treatment, and theory. *Aggression and Violent Behavior*, 3, 181 - 196.
- Austin, J., Kessler, M. L., Bailey, J. S., and Riccobono, J. E. (1996). Using feedback and reinforcement to improve performance and safety of a roofing crew. *Journal of Organizational Behavior Management*, 16(2), 49 -75.

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Alice A. Keyl Austin, PhD, BCBA-D

Contact Information

Phone: 971. 258. 5555
 E-mail: alice@akaconsultingportland.com

Educational History

Utah State University - Logan, UT
 Major: Disability Disciplines-Applied Behavior Analysis Specialization
 Degree: Doctorate of Philosophy, 2011

University of Houston - Clear Lake - Houston, TX
 Major: Behavioral Sciences-Psychology, Applied Behavior Analysis Sub Plan
 Degree: Master of Arts, 2007

Washington State University - Pullman, Washington
 Major: Psychology
 Degree: Bachelor of Science, 2004

Professional Certifications

November 2007 Board Certified Behavior Analyst – Doctoral level (BCBA-D)
 November 2011 Oregon Intervention System

Professional Experience

May 2011 to present	AKA Consulting Owner/Consultant Position duties include providing ABA-based consultation, assessment and training to families, schools and other organizations, as well as professional supervision (BCBA/BCaBA).	Portland, OR
May 2010 to July 2011	Developmental Skills Lab/Bear River Activity Center Behavior Analyst Position duties included staff training, reviewing and updating client behavior intervention plans, and writing monthly progress reports for adults with developmental disabilities.	Logan, UT
August 2010 to June 2011	Davis County School District (via Utah State University) Behavior Analyst Position duties included designing and maintaining a model ABA-based preschool classroom for children with autism. Specific duties include staff training, designing and supervising curriculum development, designing behavior intervention plans and parent training and consultation. Advisor: Thomas S. Higbee, Ph.D., BCBA-D	Kaysville, UT

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Professional Experience continued

October 2007 to June 2011	Chrysalis Behavior Analyst Position duties included conducting functional behavior assessments, designing behavioral interventions, staff training, and monthly progress notes for adults with disabilities living in a group home setting.	Logan, UT
August 2007 to June 2011	Utah State University Graduate Assistant Position duties included case management and curriculum development for preschool students with autism, staff supervision and training, parent training, private family consultation and public school consultation for children with autism. Advisor: Thomas S. Higbee, Ph.D., BCBA-D	Logan, UT
January 2009 to February 2010	STE Consultants Behavior Analyst Position duties included reviewing behavioral interventions for individuals with developmental disabilities under the care of California state regional centers.	Berkeley, CA
March 2006 to July 2007	The Mental Health and Mental Retardation Authority of Harris County Behavior Therapist Position duties included conducting functional behavior assessments, design and implementation of behavior analytic interventions to reduce problem behavior, and parent training.	Houston, TX
June 2006 to July 2007	University of Houston - Clear Lake Teacher Trainer Provided training to teachers of children with developmental disabilities within local school districts. Training focused on skill acquisition in areas such as preference assessments and various prompting procedures. Advisor: Dorothea C. Lerman, Ph.D., BCBA-D	Houston, TX
September 2005 to July 2007	University of Houston - Clear Lake Research Assistant Position duties included providing reliability data collection for graduate assistants, completing functional analyses within local school districts, and formalizing and implementing research designs involving observer accuracy and teacher training. Advisor: Dorothea C. Lerman, Ph.D., BCBA-D	Houston, TX
November 2005 to May 2006	In-home ABA Behavior Therapist Position duties included implementing an intensive home-based behavior analytic program with a 9-year-old boy.	League City, TX

Alice A. Keyl Austin, PhD, BCBA-D

Professional Experience continued

January 2003 to May 2003	Washington State University Research Assistant Position duties included recruitment of participants and data management for research in infant temperament. Advisor: Masha A. Gartstein, Ph.D.	Pullman, WA
August 2002 to May 2003	Washington State University Research Assistant Position duties included human and animal operant research, data analysis, and formalizing and implementing a pilot research design. Advisor: Frances K. McSweeney, Ph.D.	Pullman, WA

Teaching Experience

Fall 2009	Utah State University Instructor SPED 6700 Graduate level course in single-subject design Advisor: Robert Morgan, Ph.D.	Logan, UT
Spring 2009	Utah State University Teaching Assistant SPED 5050 Undergraduate course in applied behavior analysis (Part II) Advisor: Robert Morgan, Ph.D.	Logan, UT
Fall 2008	Utah State University Teaching Assistant SPED 5010 Undergraduate level course in applied behavior analysis (Part I) Advisor: Thomas S. Higbee, Ph.D., BCBA-D	Logan, UT
Summer 2003	Washington State University Teaching Assistant PSYCH 384 Undergraduate level course in Perception Advisor: Benjamin P. Kowal, Ph.D.	Pullman, WA

Professional Presentations

- Keyl Austin, A. A.** (2012, April). *Applied Behavior Analysis: What is it and How Can it Help My Child?* Lecture presented at the 1st annual meeting of the Southwest Washington Special Education and Resource Fair, Vancouver, WA.
- Keyl Austin, A. A., Higbee, T. S., Boyle, M. A., & Brodhead, M. T.** (2012, February). *Evaluating the Effects of Reinforcer Choice and Reinforcer Variation on Response Rates of Children with Autism.* Paper presented at the 30th annual meeting of the California Association for Behavior Analysis, Garden Grove, CA.

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Professional Presentations continued

- Keyl Austin, A. A., Samaha, A. L., Bloom, S. E., & Boyle, M.** (2011, May). *Effects of Preference and Stimulus Variation on Response Persistence*. Paper presented at the annual meeting of the Association for Behavior Analysis International, Denver, CO.
- Keyl Austin, A. A., Brodhead, M., Sellers, T. P.** (2011, February). *Ethical Considerations for Clinical Applied Behavior Analysts*. Workshop presented at the annual meeting of the California Association for Behavior Analysis, Burlingame, CA.
- Keyl Austin, A. A., Samaha, A. L., Bloom, S. E., & Boyle, M.** (2011, February). *Effects of Preference and Stimulus Variation on Response Persistence*. Paper presented at the annual meeting of the California Association for Behavior Analysis, Burlingame, CA.
- Keyl Austin, A. A., Brodhead, M.** (2010, October). *Effective Strategies for Reducing and Replacing Difficult Behaviors in Young Children*. Lecture presented at the annual Utah Early Childhood Special Education Conference, Provo, UT.
- Keyl Austin, A. A. & Kelly, K. N.** (2010, June). *Data Collection and Interpretation*. Workshop presented at the June Institute for Granite School District educators, Salt Lake City, UT.
- Keyl Austin, A. A.** (2010, June). *Using Independent Activity Schedules to Promote Play Skills in Children with Autism*. Lecture presented at the annual Effective Practices Conference, Logan, UT.
- Keyl, A. A., Johnson, R. N., Thomas, W. P., & Odum, A.** (2010, May). *Methylphenidate Changes the Within-Session Pattern of Response Rates of Rats*. Paper presented at the annual meeting of the Association for Behavior Analysis International, San Antonio, TX.
- Keyl, A. A. & Higbee, T. S.** (2010, May). *Reduction of Problem Behavior Using a Signaled Delay to Reinforcement Procedure on the Problem Behavior of Young Children with Autism*. Paper presented at the annual meeting of the Association for Behavior Analysis International, San Antonio, TX.
- Bloom, S. E., Lambert, J. M., Pollard, J. S., Sellers, T. P., Dayton, E., Samaha, A., & **Keyl, A. A.** (2010, May). *Evaluation of a Teacher Conducted Trial-Based Functional Analysis*. Paper presented at the annual meeting of the Association for Behavior Analysis International, San Antonio, TX.
- Higbee, T. S., **Keyl, A. A.**, Pollard, J. S., Kelly, K. N., Sellers, T. P., & Snyder, K. (2010, February). *Using Activity Schedules to Promote Appropriate Independent and Interactive Play Skills for Children with Autism*. Workshop presented at the annual meeting of the California Association for Behavior Analysis, Irvine, CA.
- Keyl, A. A. & Higbee, T. S.** (2010, February). *Reduction of Problem Behavior Using and Signaled Delay to Reinforcement Procedure*. Paper presented at the annual meeting of the California Association for Behavior Analysis, Irvine, CA.
- Keyl, A. A., Johnson, R. N., Thomas, W. P., & Odum, A.** (2010, February). *Effects of Methylphenidate on the Within-Session Pattern of Response Rates of Rats*. Poster presented at the annual meeting of the California Association for Behavior Analysis, Irvine, CA.
- Keyl, A. A. & Higbee, T. S.** (2009, October). *Reduction of Problem Behavior Using and Signaled Delay to Reinforcement Procedure*. Poster presented at the Nevada Association for Behavior Analysis, Reno, NV.

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Professional Presentations continued

- Keyl, A. A.** (2009, June). *Toilet Training for Individuals with Developmental Disabilities*. Lecture presented at the annual Effective Practices Conference, Logan, UT.
- Keyl, A. A.** (2008, June). *Developing an Appropriate Curriculum for Students with Autism and other Developmental Disabilities*. Lecture presented at the annual Effective Practices Conference, Logan, UT.
- Keyl, A. A.,** Lerman, D. C., & Mullen, S. K. (2008, May). *Effects of Novel Reinforcer Presentation and Reinforcer Variability on the Within-Session Response Rates of a Developmentally Disabled Child Completing an Academic Task*. Poster presented at the annual meeting of the Association for Behavior Analysis International, Chicago, IL.
- Hovanetz, A. A., Lerman, D. C., Tetreault, A. N., Karp, H.J., Mahmood, A., Strobel, M.J., Mullen, S.K., & **Keyl, A.A.** (2008, May). *Applying Signal Detection Theory to the Study of Observer Accuracy and Bias in Behavioral Assessment*. Paper presented at the annual meeting of the Association of Behavior Analysis International, Chicago, IL.
- Mullen, S. K., Lerman, D. C., & **Keyl, A. A.** (2008, May). *Concurrent Schedules of Negative Reinforcement*. Poster presented at the annual meeting of the Association Behavior Analysis International, Chicago, IL.
- Lerman, D. C., Hovanetz, A. N., Strobel, M. J., Tetreault, A., Garro-Quillin, J. M., **Keyl, A. A.,** Mahmood, A., Mullen, S. K. (2007, May). *Further Evaluation of an Intensive Teacher Training*. Paper presented at the annual meeting of the Association for Behavior Analysis International, San Diego, CA.
- Keyl, A. A.,** Lerman, D. C. (2007, May). *Effects of Extinction on a Heterogeneous Two-Response Behavior Chain*. Poster presented at the annual meeting of the Association for Behavior Analysis, San Diego, CA.
- Mullen, S. K., Sevin, B. M., & **Keyl, A. A.** (2007, March). *To Ask or Not to Ask: Establishing Discriminated Manding Following FCT*. Poster presented at the annual Meeting of the Texas Association for Behavior Analysis, Dallas, TX.
- Varao, R. S., McSweeney, F. K., Kowal, B. P., **Keyl, A. A.,** & Elliot, M. (2003, May). *Within-Session Changes in Responding for People Working on a Computer Puzzle*. Poster presented at the annual meeting of the Association of Behavior Analysis, Boston, Massachusetts.

Peer-Reviewed Publications

- Keyl Austin, A. A., & Higbee, T. S.** (submitted for review). Reinforcer variation: A narrative review. *Evidence-based Communication and Assessment Intervention*.
- Keyl Austin, A. A.,** Samaha, A. L., Bloom, S. E., & Boyle, M. A. (accepted for publication). Effects of preference and reinforcer variation on within-session response patterns of responding. *Journal of Applied Behavior Analysis*.
- Sellers, T. P., Bloom, S. E., Samaha, A. L., Dayton, E., Lambert, J. M., & **Keyl-Austin, A. A.** (accepted for publication). Evaluations of the conditions under which choice does and does not function as a reinforcer. *Journal of Applied Behavior Analysis*.

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Peer-Reviewed Publications continued

Lerman, D. C., Tetreault, A., Hovanetz, A., Bellaci, E., Miller, J., Karp, H., Mahmood, A., Strobil, M., Mullen, S., **Keyl, A.**, & Toupard, A. Applying signal detection theory to the study of observer accuracy and bias in behavioral assessment. *Journal of Applied Behavior Analysis*, 43, 195-213.

Non-Refereed Publications

Morgan, B., Sellers, T., & **Keyl, A.** (2009). How to change behavior in the context of an FBA-based intervention. *Utah Special Educator*, 31, 28-31.

Manuscripts in Preparation

Keyl Austin, A. A., Higbee, T. S., Boyle, M. A., Brodhead, M. T. Evaluating the effects of reinforcer choice and reinforcer variation on response rates of children with autism.

Editorial Experience

2009 **Guest Reviewer**
Journal of Applied Behavior Analysis

2010 **Guest Reviewer**
Journal of Applied Behavior Analysis

Membership in Professional Associations

Association for Behavior Analysis International
Association for Professional Behavior Analysts
Utah Association for Behavior Analysis
Psi Chi (National Honor Society in Psychology)
Golden Key National Honor Society

Scholarships and Awards

- | | |
|-----------------------------|---|
| February 2010 | California Association for Behavior Analysis;
Julie Vargas Award (for student research in the field of behavior analysis) |
| Fall 2007 to
Spring 2008 | Utah State University
Presidential Fellowship Award |
| Spring 2007 | University of Houston – Clear Lake
University Endowment |
| Fall 2005 to
Fall 2006 | University of Houston – Clear Lake
Dollars for Scholars |

Melissa J. Gard, Ph.D., M.A., B.C.B.A.

Address: 1346 SE 43rd Ave #4
Portland, OR 97215
Phone: 612.432.4135
EMAIL melissa4135@gmail.com

Education

- B.A. Creighton University, Omaha, NE (2000)
Major: Psychology
Major: Spanish
- M.A. University of Kansas, Lawrence, KS (2004)
Human Development and Family Life
Thesis Title: An Evaluation of the Effectiveness of Parent Training Using Recommendations, Graphs as Feedback, and Data Collection on Parent and Child Behavior
- Ph.D. University of Kansas, Lawrence, KS (May 2012)
Applied Behavioral Science
Advisor: Glen White
Dissertation title: An Evaluation of Sight Word Instruction Procedures for Children with Autism: Interspersed Trial Training

Professional Certification

Board Certified Behavior Analyst (2006).

Professional Positions

- June 2012-present *BCBA, Building Bridges, Portland, OR.*
- May 2012-present *Adjunct Faculty, Helfgott Research Institute, National College of Natural Medicine, Portland, OR. Research mentor for graduate students, with emphasis on research in autism or developmental disabilities. Teaching responsibilities include a journal club course focused on critical evaluation of experimental studies that include behavior change as an independent or dependent variable.*
- Oct 2006-Feb 2011 *Clinical Supervisor, Lovaas Institute Midwest, Minneapolis, MN*
Implement and supervise the complete intensive early intervention behavior therapy program for families as assigned by the Clinical Director. Provide individualized intensive early intervention services based on the principles of Applied Behavior Analysis to families and staff in their environments (home, school, and community). Responsibilities included conducting regular Progress

- Reviews and Clinical Review Meetings for each child, reviewing the children's programs with the treatment team and parents, and making any necessary changes in the children's programs to ensure optimal progress. Conducted assessment and training utilizing methods that have been demonstrated through ABA to be effective. Provide services that place the highest priority on an ethical regard for the best interests of the children served. Children ranged in age from 1.5 to 10 years old, and were both male and female. Programming targeted all areas of development, language/communication, comprehension, gross and fine motor skills, self care, and social skills. Functional assessments drove the development of behavior control procedures, focused equally on reducing maladaptive behavior and increasing adaptive behavior.
- Jan 2006-July 2007 *Senior Behavior Therapist, Lovaas Institute Midwest, Minneapolis, MN.* Responsible for assisting the child's clinical supervisor in the development and implementation of individualized programs for young children with autism. Also responsible for conducting staff and parent training in home, community, and school settings. Programs included social skills, peer play, 1 term to multiple term language using the language matrix, generalized compliance, play using observational learning, and video modeling among other procedures. Compiled weekly data for each skill objective.
- June 2005- Dec 2005 *Clinical Supervision, Fundación Planeta Imaginario, Barcelona, Spain.* Interim Clinical Director with the objective of providing clinical direction for the organization. Priorities focused on developing and implementing processes to ensure regular progress evaluations for all clients. The review process was paired with staff training to facilitate data driven clinical decisions. Also responsible for providing clinical feedback individualized for each client, regarding the appropriate development and implementation of programs as well as conducting staff training to facilitate the incorporation of advances in the area of techniques currently used in other Lovaas replication sites and based on the principles of Applied Behavior Analysis.
- January -June 2005 *Training in Clinical Supervision, Lovaas Institute Midwest, Minneapolis, MN.* Received 1-1 training regarding clinical supervision in the areas of developing individualized treatment plans, programming, and assessing progress for young children with autism. Training was completed with multiple children, across various skill levels, and included both families receiving intensive treatment and those receiving consultation services.

- 2003-June 2005 *Senior Behavior Therapist, Lovaas Institute Midwest, Minneapolis, MN.*
- 2003-June 2005 *Behavior Therapist, Lovaas Institute Midwest, Minneapolis, MN. Responsible for providing therapy directly with the child in a one-to-one setting in the child's home and community. Programs included language development for a non-verbal child, verbal imitation, and self-help skills.*
- 2002-2003 *Senior Behavior Therapist, Families for Effective Autism Treatment (FEAT) of Minnesota, Minnetonka, MN*
- 2002- 2003 *Behavior Therapist, FEAT of Minnesota, Minnetonka, MN*
- Fall 2002 *Graduate Teaching Assistant, St. Cloud State University, St. Cloud, MN. Assisted with the graduate psychology course CPSY: Single Case Design, taught by Dr. Eric Rudrud. Developed online quizzes and tests on each chapter, and online questions for each lecture to encourage the discussion between students using the online discussion board.*
- Fall 2001 *Graduate Teaching Assistant, University of Kansas, Lawrence, KS. Assisted with the undergraduate human development course Research and Action in the Community, taught by Dr. Glen White.*
- 2000- 2002 *Graduate Research Assistant, University of Kansas, Lawrence, KS. Conducted research in the area of increasing health for people with physical disabilities. Implemented group design research using the principles of applied behavior analysis to prevent or reduce the incidence of secondary conditions for individuals with spinal cord injuries.*
- 1998- 2002 *Independent Behavior Therapist, Lincoln, NE; Lawrence, KS, Kansas City, KS.*

Related professional experience

- 2011 *Independent Family Consultant for Autism and Related Disorders Minneapolis, MN*
- 2011 *Consultant and Autism Specialist for Summer Camp Program. Dodge Nature Center, West St. Paul, MN*

Publications

(unpublished dissertation, in process)

Klatt, K. P., White, G. W., & Gard M. J. (2003). Do They Get it? Exploring the Value of Research and the Ability of Participants with Disabilities to Identify Key Components of a Research Article. *Journal of Disability Policy Studies, 14*, 2-6.

Presentations and Posters

Gard, M. J. & White, G. W. (2012). An Evaluation of Sight Word Procedures for Children with Autism: Interspersed Trial Training. Poster presented at the Applied Behavioral Sciences Departmental Poster Fair, Lawrence, KS.

Gard, M., Whitcraft, C., Adamek, R., Currier, T., & Larsson, E. (2008). The Role of Generative Responding on the Acquisition of Novel Language Exemplars. Poster presented at the 33rd annual convention of the Association for Behavior Analysis, Chicago, IL.

Stalder, A., Falardeaux, S., Gard, M., Oldham, K., & Larsson, E. (2008). Effects of Visual Feedback on Parents' Completion of Clinically Recommended Hours: IEIBT and Autism. Poster presented at the 33rd annual convention of the Association for Behavior Analysis, Chicago, IL.

Larsson, E.V., Riedesel, K., Rodriguez-Garcia, V., Gard, M., (2006). Método y Programas de Abordaje del Lovaas Institute. Presented at El Congreso Internacional de autismo, Buenos Aires, Argentina.

Gard, M., Dable, K., & Born, K. (2005). A Comparison of Stereotypy as Reinforcement and Traditional Reinforcement on Response Acquisition. Poster presented at the 31st annual convention of the Association for Behavior Analysis, Chicago, IL.

Gard, M. J., White, G. W., & Larsson, E. V. (2004, May). An Evaluation of the Effectiveness of Parent Training Using Recommendations, Graphic Feedback and Data Collection on Parent and Child Behavior. In Symposium presented at the 30th annual convention of the Association for Behavior Analysis, Boston, MA. Chair: Larsson, E. V. *Generalized visual antecedent and dynamic visual feedback mechanisms in parent and staff training (Data Based Presentation)*.

Larsson, E. V., Divelbiss, K., Gard, M. J., Grimes, N., Fouquette, C., Dable, K., Wolden, K. (2003, May). *Intensive Early Intervention: a Comprehensive System for Planning and Implementing the Generative Language Curriculum*. Workshop presented at the 29th annual convention of the Association for Behavior Analysis, San Francisco, CA.

White, G. W., Wyatt, D. A., Gard, M., & Rowland, J. (2001, June). Increasing independence by reducing the incidences of secondary conditions (RISC). In G. White (Chair), *Health and Disability: Strategies for Empowerment and*

Independence. Roundtable conducted at the 8th biennial conference of the Society for Community Research and Action, Atlanta, GA.

Workshops

White, G. W., & Gard, M. (2005, March). *Bowel Dysfunction: What is it and how do we manage it?* Christopher Reeve Paralysis Foundation Sponsored Workshop at Centro Ann Sullivan del Perú, Lima, Perú.

Gard, M., & White, G. W. (2005, March). *Depression: What is it and how do we manage it?* Christopher Reeve Paralysis Foundation Sponsored Workshop at Centro Ann Sullivan del Perú, Lima, Perú.

Riedesel, K. L., Fouquette, C., Gard, M. J., & Larsson, E. V. (2004, May). *Intensive Early Intervention: Advanced comprehension, production, and social language skills program*. Workshop presented at the 30th annual convention of the Association for Behavior Analysis, Boston, MA.

Professional Affiliations

The Association for Behavior Analysis
Behavior Analyst Certification Board
The Oregon Association for Behavior Analysis (OR-ABA)

Jennifer White

21123 SW Bedstraw Terrace Sherwood, OR 97140 • (615) 584-6175 • jmwhite2006@gmail.com

Education

Lipscomb University (Nashville, TN) <i>Applied Behavior Analysis Endorsement</i>	May, 2015
Belmont University (Nashville, TN) <i>Master of Arts Special Education</i>	May, 2012
University of Missouri-Columbia (Columbia, MO) <i>Bachelor of Arts, Communication</i> <i>Bachelor of Science, Human Development and Family Studies</i>	May, 2006

Certification

Board Certified Behavior Analyst License # 1-16-21939	February 2016
Oregon Licensed Behavior Analyst License # ABA-B-10175998	April 2016
Oregon Pre-K-12 Special Education License License # 10437605	December 2015

Relevant Experience

Program Coordinator A Hope For Autism (Portland, OR) <ul style="list-style-type: none"> • Provide center-based Applied Behavior Analysis services for children ages 18 months to 10 years • Management of all center-based operations including staff and client scheduling, environmental set up, and group placement • Development of curriculum and program design for center-based services including: Toddler Program, Early Learners Program, Social Learners Program, Day Treatment Program, Winter and Summer Camps • Create lesson plans and work systems to promote independence, academics, and functional skills for clients during group learning times • Complete assessments and client intakes using internal assessments and VB-MAPP • Write program descriptions for implementation of Discrete Trial Training and Natural Environment Training • Conduct parent/family trainings on behavioral strategies and principles of ABA, ensure carryover and consistency of programs and interventions for generalization in the natural environment • Write treatment and behavior plans based on assessments that outline client goals and progress • Conduct functional assessments to write Behavior Reference Guides and Behavior Intervention Plans • Develop and interpret skill acquisition programs, ongoing data collection methods, and research based behavioral interventions based on the principles of ABA • Train and supervise Program Managers and Registered Behavior Technicians • Lead staff meetings to discuss behavior interventions and client programming • Create and deliver staff trainings in the areas of Natural Environment Training, Motivating Operations, Schedules of Reinforcement, and Verbal Behavior 	April 2015-Present
Exceptional Education Teacher and Exceptional Education Chair J.E. Moss Elementary (Antioch, TN)	August 2010- November 2014

- Provided exceptional education services to students with varying disabilities in grades K-4
- Developed skill acquisition programs and individualized curriculum materials based on assessment results
- Customized and created individual discrete trial training (DTT) programs while keeping detailed data
- Implemented research based behavior reduction strategies based on the principles of Applied Behavior Analysis
- Conducted Functional Behavior Assessments and developed Behavior Intervention Plans
- Wrote and monitored IEPs and TCAP-Alt Portfolios for students, kept weekly progress data on goals
- Facilitated social skills lessons in both 1:1 and group settings
- Provided consultation to teachers and parents in order to execute behavior reduction interventions
- Trained and supervised exceptional education teachers and para-professionals
- Led exceptional education team meetings to discuss lesson planning and behavior support interventions
- Mapped caseload management for each exceptional education teacher, para-professional and student placement in general education, and resource and inclusion schedules for exceptional education team
- Created and presented trainings on accommodations, modifications, and behavior interventions

Behavior Support for Extended School Year June 2014- July 2014
Metro Nashville Public Schools (Nashville, TN)

- Compiled programs for DTT that align to student IEP goals
- Created resources (DTT materials, work boxes, work folders) and data sheets to address student IEP goals
- Took detailed data on incidental teaching, IEP and DTT goals, write weekly student progress reports
- Consulted with parents and teachers on strategies to address student aggression and behavior
- Created visuals and behavior reward systems to help students meet behavior goals

Recruiting Supervisor June 2007- June 2010
Youth Villages (Nashville, TN)

- Supervised five employees who manage the recruitment of foster parents into training classes
- Trained staff on public speaking, marketing strategies, documentation and time management
- Trained foster parents on techniques for working with behaviorally challenged children
- Created development plans and evaluations for employees to assess strengths, weaknesses and advancement
- Interviewed and evaluated candidates for the position of Recruiter and Recruiter/Trainer
- Prepared extensive marketing plans and budgeting reports for each class cycle and year end
- Developed a tracking system for data on certifications, inquiries, referral methods and community involvement

ABA Therapist April 2005- August 2006
Boone County Group Homes (Columbia, MO)

- Guided an autistic child through over 25 programs that increase adaptive, language, social and behavior skills
- Provided input to influence the adjustment and customization of programs
- Aided child in mastering five programs receptively and expressively
- Maintained detailed records of programs, behaviors and development

Professional Memberships

Oregon Association for Behavior Analysis

Association for Behavior Analysis International

References

Annette Little, PhD, BCBA-D
Director of ABA Program and Associate Professor of Education, Lipscomb University

(615) 460-6597

Amber Music, PhD, BCBA-D
Senior Behavior Analyst, Metro Nashville Public Schools
Adjunct Professor, Lipscomb University

(615) 691-3405

David Hall, MASE
Lead Teacher, Victory Academy

(765) 215-8006

APPENDIX B LIBRARY COLLECTION REVIEW

Oregon Tech Library Resources and Services Evaluation for the MS in Applied Behavior Analysis

The Oregon Tech Libraries offer resources and services to meet the needs of Psychology undergraduate students. With some limited additional resources (see suggested titles below), the library would be able to meet the needs of the MS in Applied Behavior Analysis. Library resources and services are available to the students and faculty on the Klamath Falls and Wilsonville campuses.

Oregon Tech Libraries' current holdings (books, journals, videos) in the broad subject category of psychology contain approximately 8,600 titles. Of these 28% of the books and government document titles have been published within the last 5 years, and many are available online. These holdings include a Journal of Applied Behavior Analysis subscription. During fiscal year 2015-2016 \$1,019.27 was spent on undergraduate monographs in psychology.

In addition to these materials, the Oregon Tech Libraries subscribe to the online PsycINFO database which covers over 2500 journals and "contains citations and abstracts from a wide range of scholarly literature in the psychological, social, behavioral, and health sciences" (help.psycnet.org/psycnet/getting-started/), including scholarly materials in Applied Behavior Analysis. The Libraries also subscribe to a full-text database PsycARTICLES, which contains materials from the APA and other leading publishers on the subject of psychology in general, and Applied Behavior Analysis in particular. The total cost for these databases was \$8,523 for fiscal year 2015-2016 and \$8,901 for fiscal year 2016-2017. The Libraries also purchase electronic access to other material packages directly from publishers.

<u>Electronic Article and Book Databases</u>	
PsycINFO	main source to search for scholarly articles and empirical research in psychology and related disciplines
PsycARTICLES	a subset of PsycINFO; contains full-text articles from peer-reviewed journals in basic, applied, clinical and theoretical psychology
ERIC	literature on ABA from educational perspective
PubMed/MEDLINE/CINAHL with Full Text	from biological/medical perspective
Directory of Open Access Journals	https://doaj.org/
Ebooks	http://www.oit.edu/libraries/find/books/e-books

<u>Publisher's Packages</u>	
Sage Journals Online	full text, discipline-specific research databases of the most popular peer-reviewed journals in many disciplines, including psychology
Springer Link	full text scholarly journals in psychology, including applied behavior analysis
Wiley InterScience	collection of online resources in many disciplines, including psychology; covers both books and journals

Oregon Tech Libraries extend their collections and services through membership in the Orbis Cascade Alliance, a consortium of public and private academic libraries in Washington, Oregon, and Idaho. Materials from the consortial collections can be requested through the shared catalog called Summit.

In addition to Summit borrowing, Interlibrary Loan services (ILL) deliver material from national and international sources in approximately 2 weeks, via the Online Computer Library Center (OCLC) network. OCLC is an international network and material may be requested from libraries worldwide.

Books requested through Summit or ILL are picked up in the Libraries. Students may also access Summit collections directly by going to one of the Summit participating libraries. Articles are delivered electronically through desktop delivery.

The Libraries feel that in order to support the more specialized needs of graduate students, it would be advisable to purchase additional resources. Depending on what was chosen and the program needs, this would require a modest to large increase in our dedicated psychology budget (including annual inflationary increases). These resources include:

Health and Psychosocial Instruments – provides information about behavioral measurement instruments, extracted from hundreds of journals. Estimated cost would be about \$1500/year.

Mental Measurements Yearbook with Tests in Print – provides a guide to over 2700 contemporary testing instruments. The library cancelled its print subscriptions to these due to lack of use in 2012. Estimated cost would be about \$700/year depending on its scope.

PsycTESTS – provides access to psychological tests, measures, scales, surveys, etc. Estimated cost is approximately \$7000/year.

PsycBOOKS – access to APA published books and chapters, includes the entire APA Handbooks in Psychology set. Estimated cost would be about \$5000/year.

APA Central - authoritative and complete online environment for teaching, writing, and publishing in APA Style. Designed to help users develop their writing and professional research skills, APA Style CENTRAL combines sophisticated learning and teaching tools, advanced writing and content management technology, and full integration of APA's *Publication Manual of the American Psychological Association*.

Association to create a web-based suite of integrated services and tools. Estimated cost per year: \$4,987.50.

Journals*:

Mindfulness - publishes peer-reviewed papers that examine the latest research findings and best practices in mindfulness. It explores the nature and foundations of mindfulness, its mechanisms of actions, and its use across cultures. Combined subscription per year to institutions (print & online): \$768.00/year.

Journal of Organizational Behavior Management - deals with behavior management in organizations; provides systematic and effective approaches to behavior management. Combined subscription per year to institutions (print & online): \$1082.00.

Research in Developmental Disabilities - designed to original behavioral research and theory of severe and pervasive developmental disabilities. \$1,254.00 subscription per year to institutions.

*The choice of journal titles is based on the analysis of the students' Interlibrary Loan requests

APPENDIX C US BEHAVIOR ANALYST WORKFORCE



US Behavior Analyst Workforce: Understanding the National Demand for Behavior Analysts

Produced by Burning Glass Technologies on behalf of the Behavior Analyst Certification Board.



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EXECUTIVE SUMMARY

INTRODUCTION

Burning Glass conducted an analysis of demand in the United States (US) for credentialed behavior analysts, including individuals holding the Board Certified Behavior Analyst-Doctoral™ (BCBA-D™), Board Certified Behavior Analyst® (BCBA®), Board Certified Assistant Behavior Analyst® (BCaBA®), and Licensed Behavior Analyst credentials. This report provides an analysis of the demand for these credentials from 2012 through 2014, including specialized skills, a breakdown of the roles by industry type, and the titles and occupations of these jobs. This report also includes demand for the certification in US where there exist licensure laws for behavior analysts.

KEY FINDINGS

- **Demand for credentialed behavior analysts is increasing:** Demand for behavior analyst positions more than doubled between 2012 (1,414 postings) and 2014 (3,083 postings). This is a national trend, as demand increased in almost every state.
- **Demand is highest in three states:** Despite national growth, nearly half of all job postings for behavior analysts were in one of three states: California, Massachusetts, or New Jersey. However, 18 states had 40 or more job postings in 2014 – more than double the number of states as 2012.
- **The number of newly credentialed behavior analysts tracks closely with demand:** New certifications awarded increased from 1,817 in 2012 to 3,184 in 2014.
- **The BCBA credential has the largest increase in demand:** In addition to an increasing demand for BACB credentials in general, demand is skewing more heavily toward the BCBA credential.
- **The credentials are required in a range of occupations and titles:** The existing O*Net Standard Occupational Classification (SOC) system does not neatly categorize the role of “Behavior Analyst.” Occupations that included the credential in job postings include Counselors, All Other; Clinical, Counseling, and School Psychologists; Special Education Teachers; and Teacher Assistants; among others. Clear opportunities exist to create a unified occupation and to identify the skills required for these roles.
- **Skill demand varies by industry:** 85% of job postings fall into Health Care, Educational Services, or Social Assistance industries. While job postings consistently call for experience working with autism and developmental disabilities in addition to behavior-analytic experience, each industry asks for a different mix of skills:
 - **Health Care:** These roles call for treatment planning, therapy, and case management skills. This is reflected also in the titles for these positions, such as therapist and clinician.
 - **Educational Services:** These positions are primarily located within schools and call for skills in data collection and school psychology. School Psychologist is the most common title in this industry.
 - **Social Assistance:** The skills are more varied here, including therapy skills, employee training, and treatment planning. Many of the positions in this industry have titles such as behavior analyst, clinical manager, and clinical supervisor.



ABOUT BURNING GLASS

Burning Glass's tools and data are playing a growing role in informing the global conversation on education and the workforce by providing researchers, policy makers, educators, and employers with detailed real-time awareness into skill gaps and labor market demand. Burning Glass's job seeker applications power several government workforce systems and have been shown to have a substantive impact on reemployment outcomes and on labor market literacy.

Burning Glass is proud to serve a client base that spans six continents and includes education institutions, government workforce agencies, academic research centers, global recruitment and staffing agencies, major employers, and leading job boards.

ABOUT THE DATA: DEFINITIONS

Job market data in this analysis is drawn from Burning Glass's database of online job postings, collected from over 40,000 sources. Using advanced text analytics, over 70 data fields are extracted from each posting, including job title, occupation, employer, industry, required skills, credentials, and salary. Postings are then de-duplicated and placed in a database for further analysis.

- **Occupational Demand:** Burning Glass identified occupations, as defined by the Bureau of Labor Statistics. Demand figures include the total number of job postings for behavior analysts, annually 2012-2014.
- **Occupations:** Occupations are defined by the Bureau of Labor Statistics' Standard Occupational Classification (see <http://www.bls.gov/soc/>).
- **Job Title:** Job titles reflect employer naming conventions for positions. Titles are more varied than occupations.
- **Geography:** Demand data is provided at a national level.
- **Skills:** The skills and other occupational characteristics most commonly requested by employers in job postings are presented for each occupation.
- **Employers:** The employers with the highest number of job postings annually.



DETAILED REPORT

SECTION I: BEHAVIOR ANALYST RESEARCH OVERVIEW

Burning Glass Technologies partnered with the BACB to answer the following questions:

- What is the demand for credentialed behavior analysts in the United States?
- What industries are most frequently employing credentialed behavior analysts in the United States between 2012 and 2014?
- What specialized skills are most frequently requested in conjunction with BACB credentials?
- What is the demand by level of credential both "required" and "preferred" by employers?

Note: In this demand analysis, *online job postings* served as the source of data for all analyses.

CAPTURING THE BEHAVIOR ANALYST LANDSCAPE

To define behavior analyst roles, primary (i.e., titles and credentials) and secondary (i.e., skills, employers, locations) fields were captured from real-time job market data.

Primary fields:

- **Titles:** Searched for titles: "Behavior Analyst", "Board Certified Behavior Analyst", "Board Certified Assistant Behavior Analyst", "Behavior Specialist", and "Licensed Behavior Analyst".
- **Credentials:** Searched for credentials: BCaBA, BCBA, and BCBA-D.

Secondary fields:

- **Skills:** Specialized skills within the job postings (e.g., "working with individuals with autism," "data collection and analysis").
- **Locations:** Location of job position (i.e., where the employee will work, rather than the headquarters of the company hiring).

RESEARCH SUMMARY

- Time frame: Calendar years 2012, 2013, and 2014
- There were 7,254 job postings for behavior analyst credentials that form the basis of this analysis. These jobs fell into a range of industries, but were most concentrated in:
 - Health Care: 46%
 - Educational Services: 28%
 - Social Assistance: 11%
- The majority of job postings were primarily located in a few states, especially California, Massachusetts, and New Jersey.



LANDSCAPE OF DEMAND FOR BEHAVIOR ANALYSTS

- In 2014, there were more than 3,000 individual postings for behavior analysts nationwide.
- There has been an increase in demand for credentialed behavior analysts. Total postings have doubled since 2012, from 1,414 to 3,083.
- There are currently 24 states that have passed laws to regulate behavior analysts through licensure or certification (19 of those since 2012).
- In 2014, a total of 45% of demand is concentrated in three states: California, Massachusetts, and New Jersey. Of these, only Massachusetts has enacted regulation of behavior-analytic practice through licensure.



SECTION II: OVERVIEW OF BEHAVIOR ANALYST DEMAND

In this part of the analysis, we will provide an overview of demand for behavior analysts between the years 2012 to 2014, including the following information:

- Overall demand for certified behavior analysts, including demand by credential type (i.e., BCBA-D, BCBA, BCaBA)
- Behavior analyst credential demand by state
- Industries most frequently recruiting behavior analysts
- Employers most frequently recruiting behavior analysts
- Occupations most frequently recruiting behavior analysts (based on the Department of Labor Occupational Classifications)
- Most frequently used titles for behavior analysts
- Most commonly requested specialized skills for behavior analysts

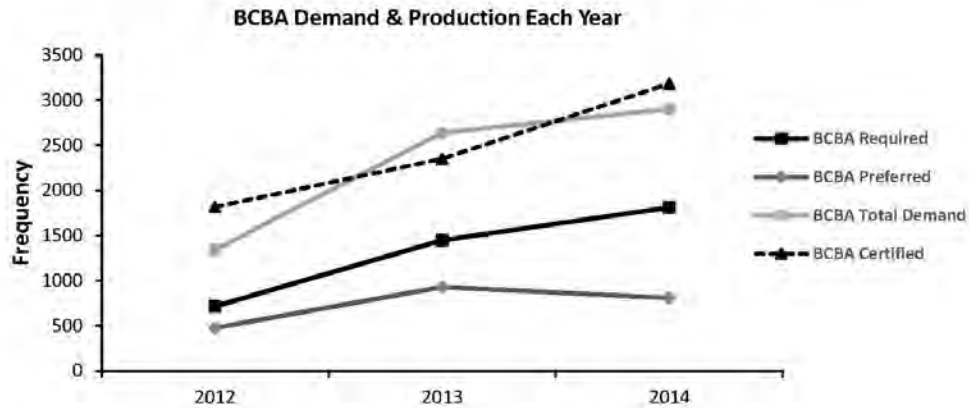
OVERALL DEMAND FOR BEHAVIOR ANALYST CREDENTIALS

The table below illustrates the frequency of job postings requesting BACB credentials, by credential type, for 2012, 2013, and 2014. The last column indicates the percentage growth from 2012 to 2014.

Posting Type	2012	2013	2014	Growth
All with BCBA	1,342	2,638	2,903	116%
Required	716	1,448	1,812	153%
Preferred	477	930	808	69%
All with BCBA-D	84	124	117	39%
Required	63	78	57	-9%
Preferred	21	46	60	186%
All with BCaBA				
Required	54	78	95	76%
Total Behavior Analyst Demand	1,414	2,757	3,083	118%



In addition, the graph below illustrates the frequency of job postings requiring or requesting the BCBA credential in relation to the number of newly credentialed BCBA certificants, by year.



Overall Demand Trends:

- While demand for the BCBA and BCBA-D credentials are increasing overall, the relative growth of the BCBA credential as a requirement for a job, rather than a preference, is increasing more quickly.
- BCaBA (not represented in above graph) credential demand, as expected, is quite low, and plateaued in 2013. Total postings requesting BCaBA as a minimum credential decreased from 2013 to 2014.



GEOGRAPHIC ANALYSIS, 2012-2014

The figure below shows the geographic distribution of demand (i.e., job postings in each state) as well as an adjacent list of states that have passed licensure law, by year, to regulate the practice of behavior analysis.



States with Licensure Requirements, as of 2012
Arizona (2009)
Kentucky (2010)
Missouri (2010)
Nevada (2010)
North Dakota (2011)
Oklahoma (2009)
Rhode Island (2012)
Virginia (2012)
Wisconsin (2010)

Additional States, 2013
Massachusetts
Ohio
Oregon

Additional States, 2014
Alabama
Alaska
Arkansas
Kansas
Maryland
New York
Tennessee

Geography Trends:

- Behavior analyst positions are increasing in frequency nationwide.
- Distinct areas of concentration for the positions exist in California, New Jersey, and Massachusetts; 45% of all job postings in 2014 were in one of these three states.



TOP INDUSTRIES

The table below lists the percentage of behavior analyst postings by industry, each year. Industries follow the North American Industry Classification System (NAICS).

Industry*	2012	2013	2014
Health Care	37%	43%	46%
Educational Services	41%	28%	28%
Social Assistance	9%	14%	11%
Insurance Carriers and Related Activities	2%	4%	5%
Other Services (except Public Administration)*	4%	4%	5%
Public Administration	2%	3%	3%
Professional, Scientific, and Technical Services	1%	2%	1%
Other Industries	4%	3%	2%

* Industries ranked by 2014 figures.

Industry Trends:

- The most frequent industries for behavior analysts are: Health Care, Educational Services, and Social Assistance.
- Additional industries with demand are insurance agencies and local governments.



TOP OCCUPATIONS

The table below lists the most frequent occupation in which each 2014 job posting was classified, based on the Bureau of Labor Statistics (BLS) Standard Occupational Classification (SOC) codes. For each of these occupations, the table illustrates the job postings by occupation ("Behavior Analyst Demand") in each year 2012-2014.

Occupation	Behavior Analyst Demand		
	2012	2013	2014
Counselors, All Other	337	833	844
Clinical, Counseling, and School Psychologists	146	317	425
Medical and Health Services Managers	104	189	259
Special Education Teachers	57	153	204
Teacher Assistants	79	108	169
Other Licensed Professionals	60	153	148
Educational, Guidance, School, and Vocational Counselors	58	67	58
Education Administrators	32	49	56
First-Line Supervisors of Office & Administrative Support Workers	11	45	47
All Occupations Total	1,414	2,757	3,083

* Occupations ranked by 2014 demand.

Occupation Trends:

- Behavior analysts do not fall neatly into a single BLS-defined occupation and are assigned to a wide variety of occupations, which is not surprising because behavior analysis is a relatively young profession without its own occupational classification.
- Behavior analysts comprise approximately 20% of the "Counselors, All Other" job postings and less than 5% of all other occupations.



TOP JOB TITLES

The table below lists the top job titles that required behavior analyst credentials from 2012-2014, ranked by frequency. Titles reflect employer language for positions.

	2012	2013	2014
1	Behavior/Behavioral Analyst	Behavior/Behavioral Analyst	Board Certified Behavior/Behavioral Analyst (BCBA)
2	Board Certified Behavior Analyst (BCBA)	Board Certified Behavior/Behavioral Analyst (BCBA)	Behavior/Behavioral Analyst
3	School Psychologist	Board Certified Behavior Analyst & Autism Tutor	ABA/Behavioral Assistant
4	Psychologist	BCBA	Psychologist
5	ABA/Behavioral Assistant	Psychologist	School Psychologist
6	BCBA	ABA Instructor/Therapist	Behavior Interventionist
7	Speech Language Pathologist	Clinical Supervisor/Director	(BCBA) Clinical Supervisor/Manager
8	Clinical Supervisor	ABA Behavioral Assistant/Assistant Analyst	Behavior Clinician
9	(ABA) Behavior Specialist/Instructor	School Psychologist	Behaviorist
10	Clinical Manager/Director	Behavior/Behavioral Consultant	(BCBA) Behavior/Behavioral Consultant
11	Professor of Education	Speech Language Pathologist	Behavior Specialist
12	Board Certified Behavior Analyst and/or Associate	(BCBA) Clinical Manager/Supervisor	Speech Language Pathologist
13	Master's Level Case Manager	Early Education Therapist	Program Analyst
14	Guidance Counselor	Professor of Education	(BCBA) Program Supervisor
15	Behaviorist	ABA Supervisor	BCBA/BCaBA
16	Lead Behavior Analyst	Behavior Specialist/ Interventionist/Therapist	Clinical Psychologist
17	Professor of Psychology	BCBA Case Manager	Instructional Assistant
18	Behavior Consultant	Educational Consultant	ABA Therapist
19	Assistant Professor of Psychology	Behaviorist	Behavioral Healthcare Manager: Autism Spectrum Disorder
20	Program Supervisor: Behavioral Health Therapy	Professor of Psychology	Board Certified Assistant Behavior Analyst
21	Psychology Manager	Program Director/Manager	Licensed Behavior Analyst



TOP SKILLS FOR OVERALL DEMAND

The table below lists top skills demanded by employers 2012-2014, ranked based on demand in 2014. These are specialized skills (and other occupational characteristics), requiring training and occupational knowledge, specifically mentioned by employers in job postings each year.

Top Skills	2012	2013	2014
Experience with Autism	43%	57%	53%
Psychology	47%	52%	47%
Treatment Planning	13%	19%	22%
Experience working with Developmental Disabilities	23%	32%	21%
Therapy	14%	23%	15%
Data Collection	10%	15%	15%
Case Management	7%	9%	9%
Mental Health	4%	7%	9%
Collaboration	3%	6%	7%
Employee Training	7%	6%	7%
Human Development	5%	5%	6%
Crisis Intervention	5%	2%	6%
Behavioral Health	4%	6%	6%
Social Services	3%	6%	5%
Experience working with Special Needs Children	5%	6%	5%
Program Development	7%	4%	4%
School Psychology	10%	3%	4%

* Top Skills ranked by 2014 demand.

Skills Trends:

- The most commonly requested skills and requirements for behavior analysts are experience with autism, psychology, treatment planning, experience working with developmental disabilities and therapy.
- Experience with autism and treatment planning are increasingly identified within job postings as being necessary.



SECTION III: INDUSTRY BREAKDOWN

In this part of analysis, we provide the most commonly requested occupations, titles, and skills of behavior analysts in the top three major industries, based on 2014 job postings.

- Health Care Industry
- Educational Services Industry
- Social Assistance Industry

HEALTH CARE INDUSTRIES

The table below lists the employers, occupations, titles, and skills in demand within the Health Care industries: Ambulatory Health Care Services, Hospitals, and Nursing and Residential Care Facilities.

Top Occupations	Top Titles	Top Skills
Counselors, All Other	Applied Behavior Analysis Therapist	Experience with Autism
Clinical, Counseling, and School Psychologists	ABA/Behavioral Assistant	Psychology
Medical and Health Services Managers	Board Certified Behavior Analyst	Treatment Planning
Other Licensed Professionals	Behavior Clinician	Experience working with Developmental Disabilities
Teacher Assistants	Clinical Supervisor	Therapy
Special Education Teachers, Preschool	Behavior Analyst	Data Collection/Analysis
First-Line Supervisors of Office and Administrative Support Workers	Psychologist	Case Management
Educational, Guidance, School, and Vocational Counselors	BCBA	Human Development
Mental Health Counselors	Clinical Psychologist	Mental Health
Speech-Language Pathologists	Behavioral Consultant	Experience with Special Needs Children

Health Care Industry Trends:

- The Health Care Industry had 1,404 job openings in 2014.
- In addition to core behavior analysis skills, health care roles more frequently called for treatment planning, therapy, case management, and human development skills than postings in other industries (represented in **bold**).



EDUCATIONAL SERVICES INDUSTRY

The table below lists the employers, occupations, titles, and skills in demand within the Educational Services industry, which consists primarily of schools and educational support services organizations.

Top Occupations	Top Titles	Top Skills
Counselors, All Other	School Psychologist	Experience with Autism
Clinical, Counseling, and School Psychologists	BCBA	Psychology
Teacher Assistants	Board Certified Behavior Analyst	Data Collection/Analysis
Teachers and Instructors, All Other, Except Substitute Teachers	Behavior Analyst	School Psychology
Postsecondary Teachers, All Other	Instructional Assistant	Experience working with Developmental Disabilities
Special Education Teachers, Preschool	Program Analyst	Special Education
Special Education Teachers, All Other	Behaviorist	Mental Health
Psychology Teachers, Postsecondary	BCBA Consultant	Therapy
Education Administrators, Elementary and Secondary School	Professor of Education	Crisis Intervention
Education Administrators, Postsecondary		Case Management

Educational Service Industry Trends:

- There were 863 job postings in the Educational Services Industry in 2014.
- These roles frequently fell into teaching roles via special education or teacher assistant roles.
- Placement in educational facilities and schools led to more frequent calls for data collection and school psychology skills than behavior analysts generally (represented in **bold**).



SOCIAL ASSISTANCE INDUSTRY

The table below lists the employers, occupations, titles, and skills in demand within the Social Assistance industry, which includes family service organizations, and child care organizations.

Top Occupations	Top Titles	Top Skills
Counselors, All Other	Behavior Analyst	Psychology
Clinical, Counseling, and School Psychologists	Clinical Manager	Experience with Autism
Medical and Health Services Managers	Board Certified Behavior Analyst	Treatment Planning
Managers, All Other	Licensed Behavior Analyst – BCBA	Experience working with Developmental Disabilities
First-Line Supervisors of Office and Administrative Support Workers	Psychologist	Therapy
Teacher Assistants	BCBA Clinical Supervisor	Employee Training
General and Operations Managers	Program Manager Autism Services	Data Collection/ Analysis
Special Education Teachers, Preschool	Behavior Specialist	Mental Health
Special Education Teachers, Middle School		Social Services
Educational, Guidance, School, and Vocational Counselors		Crisis Management

Social Assistance Trends:

- The Social Assistance Industry had 340 job postings in 2014.
- Skills in higher demand than average included psychology, treatment planning, therapy, and employee training skills (represented in **bold**).
- Managerial titles and occupations are higher in demand in this industry compared to others.

APPENDIX D US PROFESSIONAL EMPLOYMENT SURVEY

June 2015



6977 Navajo Rd. #176

San Diego, CA 92119

info@apbahome.net

www.apbahome.net

2014 U.S. Professional Employment Survey: A Preliminary Report

Disclaimer: *The Association of Professional Behavior Analysts provides the historical information in this report to assist readers in making decisions individually and independently of business competitors.*

BACKGROUND

The first survey of the employment circumstances of practitioners of applied behavior analysis (ABA) was conducted by the Association of Professional Behavior Analysts (APBA) in 2008. The 2009 report on the results of that survey has been an important source of information not only for behavior analysts, but also for employers, the larger service industry, policy analysts, and people considering careers in behavior analysis. The ensuing years have seen numerous changes in the profession, the funding mechanisms by which credentialed ABA practitioners are paid, public policies affecting their practice, and economic factors. During the past six years, for example, the number of ABA practitioners in the United States who are credentialed by the Behavior Analyst Certification Board (BACB) has increased from approximately 6,000 to almost 18,000. The number of U.S. states in which ABA practitioners must be licensed in order to offer services has grown as well (see <http://www.apbahome.net/APBALicensure.php>). Sources of third-party payments have increased substantially due to increased health insurance coverage of ABA services for individuals with autism spectrum disorders (ASDs). Finally, during that period the U.S. experienced a major economic downturn, from which it is still recovering.

A new survey was clearly in order. Invitations to participate in this electronic survey were sent by email in February, 2014 to 12,588 BACB certificants residing in the U.S. (encompassing both members of APBA and non-members) and were published on social media sites. The pool of respondents was restricted to U.S. certificants because cultural,

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economic, and monetary differences among other countries, in some instances involving small samples, would have limited the usefulness of data. Participation in the survey was voluntary, and all responses were anonymous and confidential. Respondents were instructed to answer all questions with reference to the year 2014. Usable responses were received from 925 respondents. That 7.3% return rate should be considered in interpreting the findings described in this preliminary report.

SURVEY RESULTS

Professional credentials

Figure 1 shows that 78.4% of all respondents held the Board Certified Behavior Analyst® (BCBA®) credential, with 12.4% holding the Board Certified Behavior Analyst-Doctoral® (BCBA-D®) designation and 6.5% being Board Certified Assistant Behavior Analysts® (BCaBAs®). In other words, almost 97% of respondents were EACB certificants, so that cohort is the basis for most of the following analyses, separately and collectively depending on the survey question.

A total of 17.8% of respondents were Licensed Behavior Analysts or Licensed Assistant Behavior Analysts, reflecting the genesis of state licensure laws, and 15.8% held a K-12 teaching credential. It is likely that a majority of respondents with those state-issued credentials were also BCBA or BCaBAs. Compared to the 2008 survey, these data reveal a proportional increase in BCBA respondents and decrease in BCaBA respondents, but roughly the same proportion of individuals holding a teaching credential. Only 1% of respondents (9 individuals) reported holding the new BACB Registered Behavior Technician™ (RBT™) credential. That is too small a sample to support any inferences, so data from RBTs were not included in any analyses.

Fig. 1. Credentials Held by Respondents

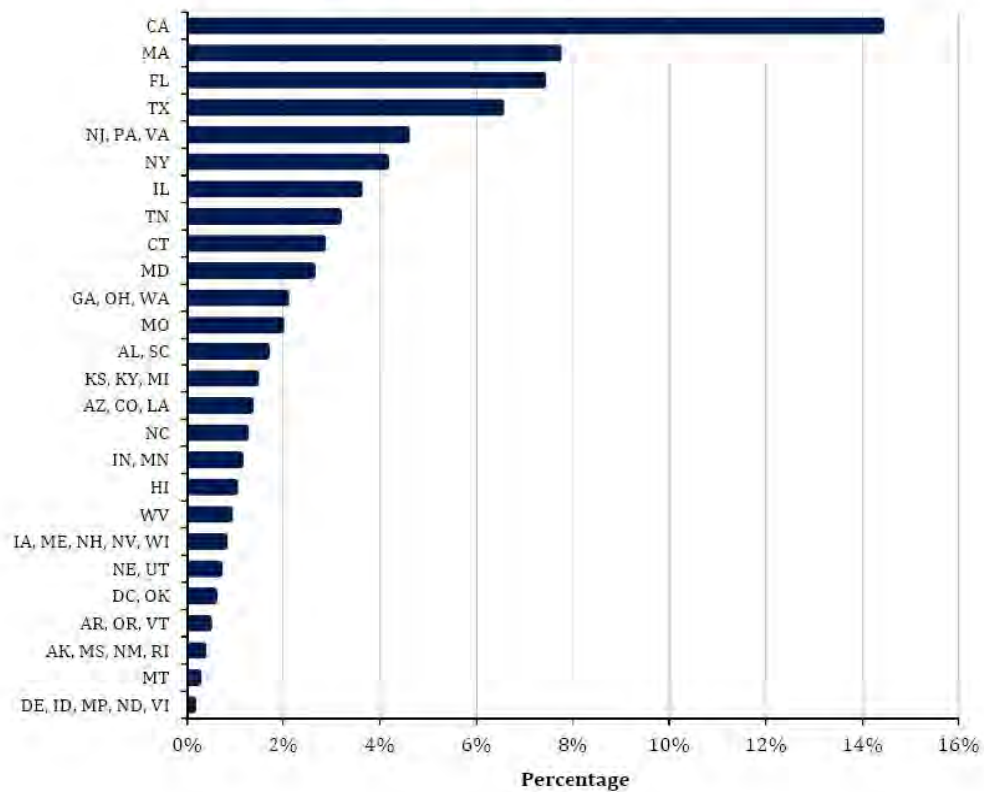


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States of residence

Figure 2 shows that more respondents lived in California during 2014 than in any other state. The three states that came closest to California were, in decreasing order, Massachusetts, Florida, and Texas, but they averaged only about half as many respondents as California (states with the same percentage of respondents are represented by a single bar).

Fig. 2. State Residence of Respondents

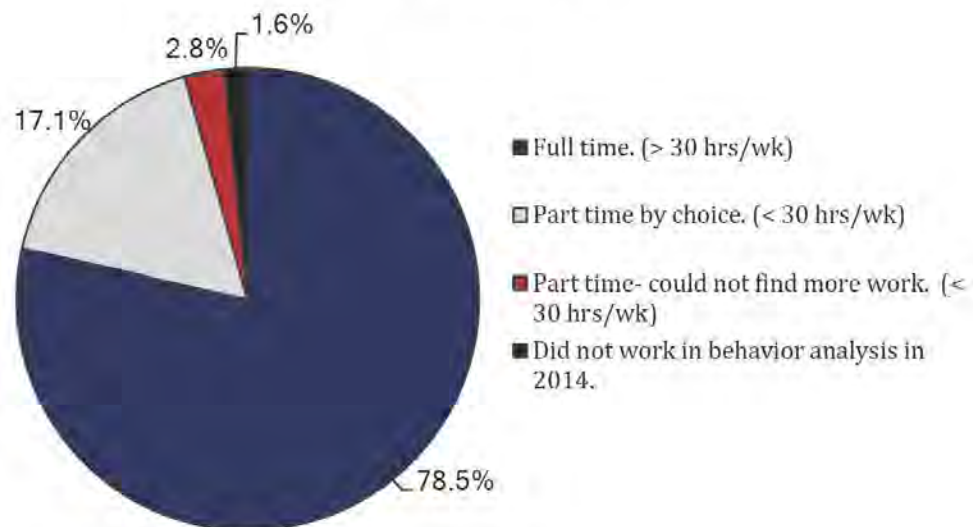


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Full-time versus part-time work

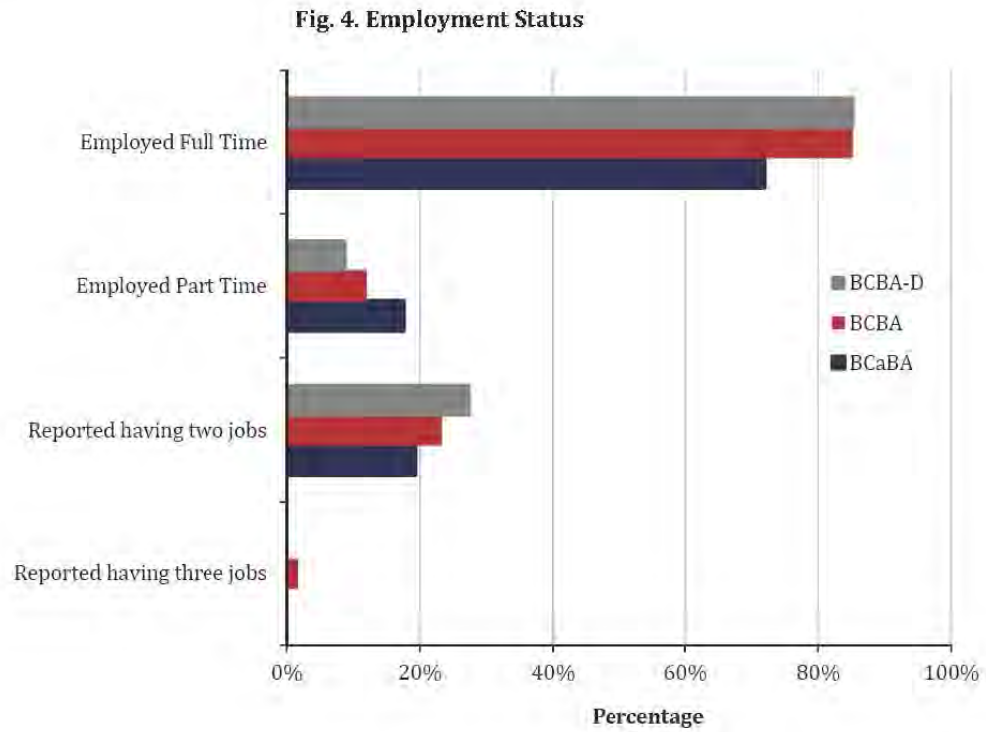
Figure 3 shows that 78.5% of all respondents worked full time in 2014, defined as more than 30 hours per week. Of those working part time, 17.1% did so by choice, and only 2.8% could not find full-time work. These findings did not differ appreciably among the two BACB credentials and the BCBA-D designation and are similar to those from the 2008 survey. That the proportion of respondents seeking professional employment was so low indicates that there continues to be high demand for credentialed providers of ABA services.

Fig. 3. Full/Part Time Work



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Figure 4 examines employment data for each type of certification in more detail. The data showed relatively little variation across certification types. About 20% or more of respondents in each category reported holding two jobs.

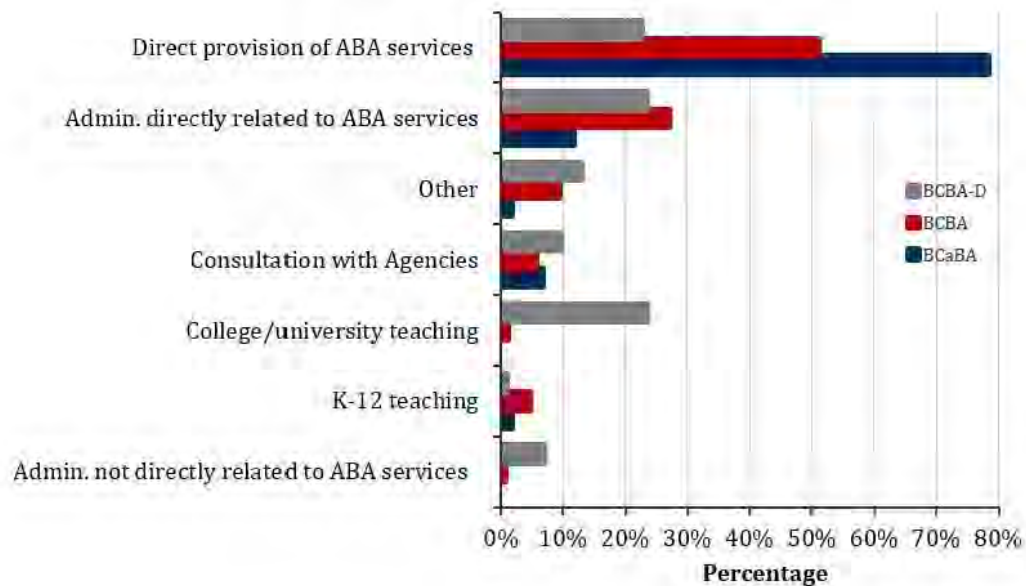


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Type of work

Overall, about half of the respondents reported that their work involved directly providing ABA services, while a quarter categorized their work as administration or supervision directly related to ABA services. Figure 5 shows, however, that these findings varied somewhat by credential. For instance, slightly more than half of BCBA-Ds were involved in providing direct services, but more than three-quarters of BCaBAs worked in that capacity. Higher education teaching was reported by almost a quarter of BCBA-Ds, who were much less engaged in provision of clinical services than were the other types of certificants.

Fig. 5. Type of Work by Credential

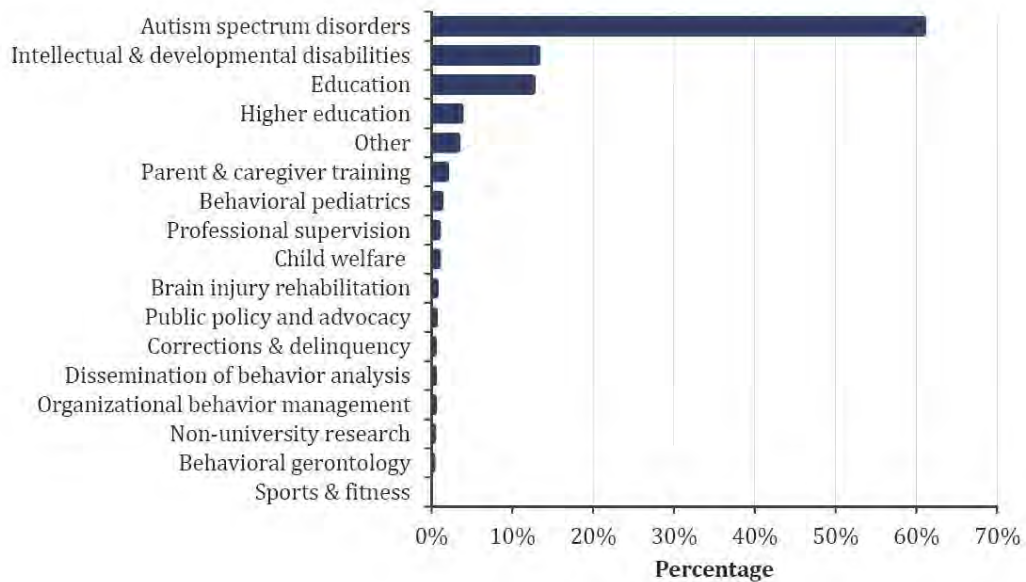


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Areas of work

Perhaps it should not be surprising that the majority of respondents (60.9%) reported that they primarily provided services to people with ASDs (Figure 6). The two next most reported areas of work were intellectual/developmental disabilities services (13.1%) and education (12.5%). All other categories were selected by fewer than 5% of respondents. These findings were generally consistent for BCBAs and BCaBAs. Only 43.5% of BCBA-D respondents reported working in ASD, however, presumably because 20% worked in higher education.

Fig. 6. Area of Work

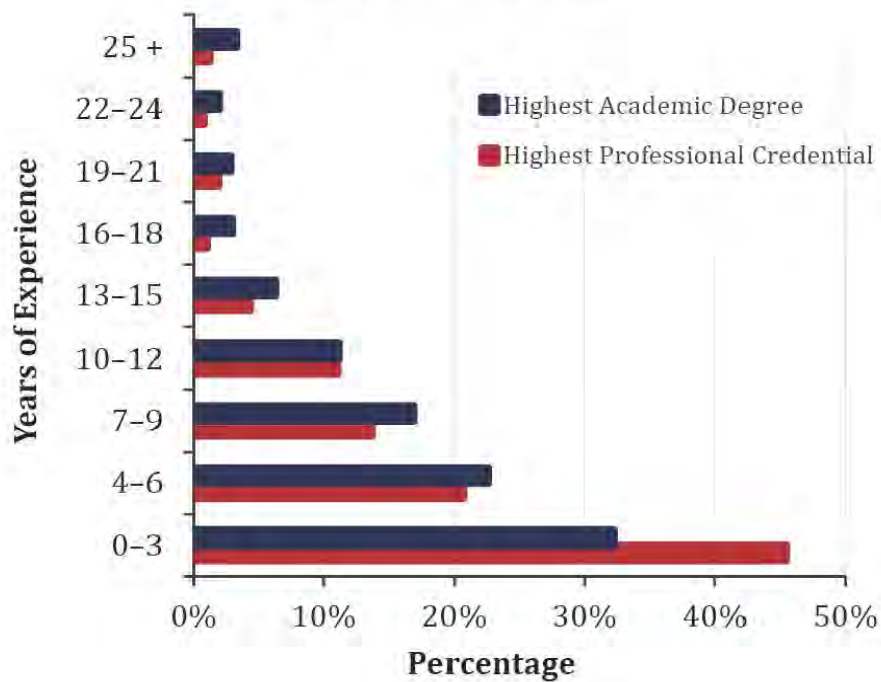


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Experience

Figure 7 shows years of experience respondents reported since earning their highest academic degree and highest professional credential, respectively. Both sets of data indicate that the majority of ABA practitioners who completed this survey are in the early stages of their careers. Although the sampling bias cannot be known, the BACB only started issuing credentials 16 years ago, and most certificants completed their training only in the last few years. Aside from other time-related changes, as the field accumulates more senior practitioners we may expect to see corresponding changes in some of the economic data obtained in future surveys of this type.

Fig. 7. Years of Experience

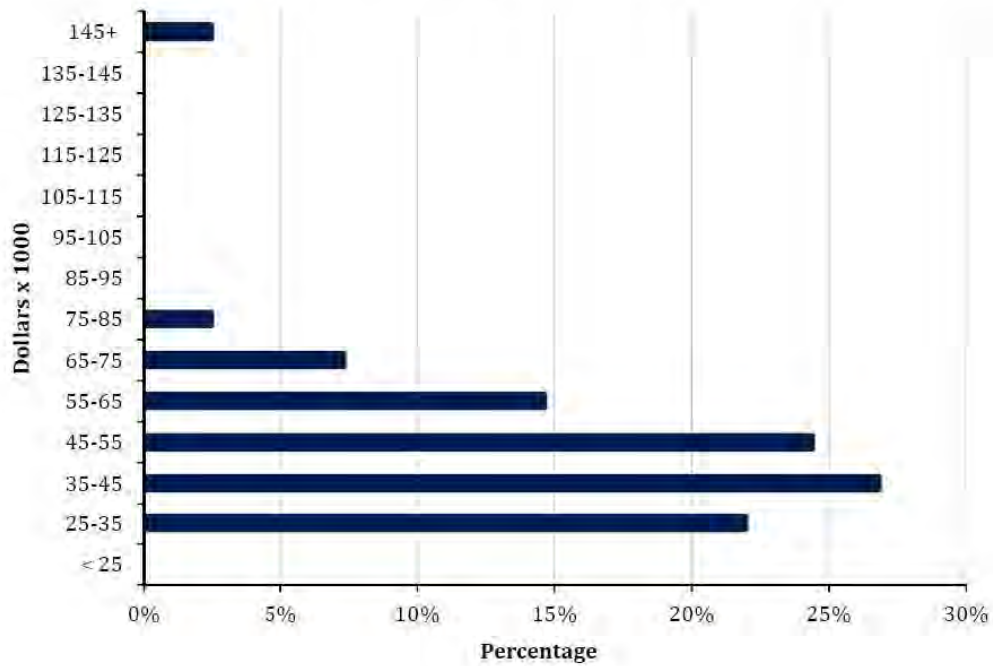


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Annual income

The total annual income earned for respondents who reported working full time is displayed for each certificant cohort in Figures 8, 9, and 10. Figure 8 shows that the modal annual income of BCaBAs was between \$35,000 and \$45,000. However, nearly one quarter (24.4%) reported earning between \$45,000 and \$55,000, and another quarter (26.7%) earned higher incomes.

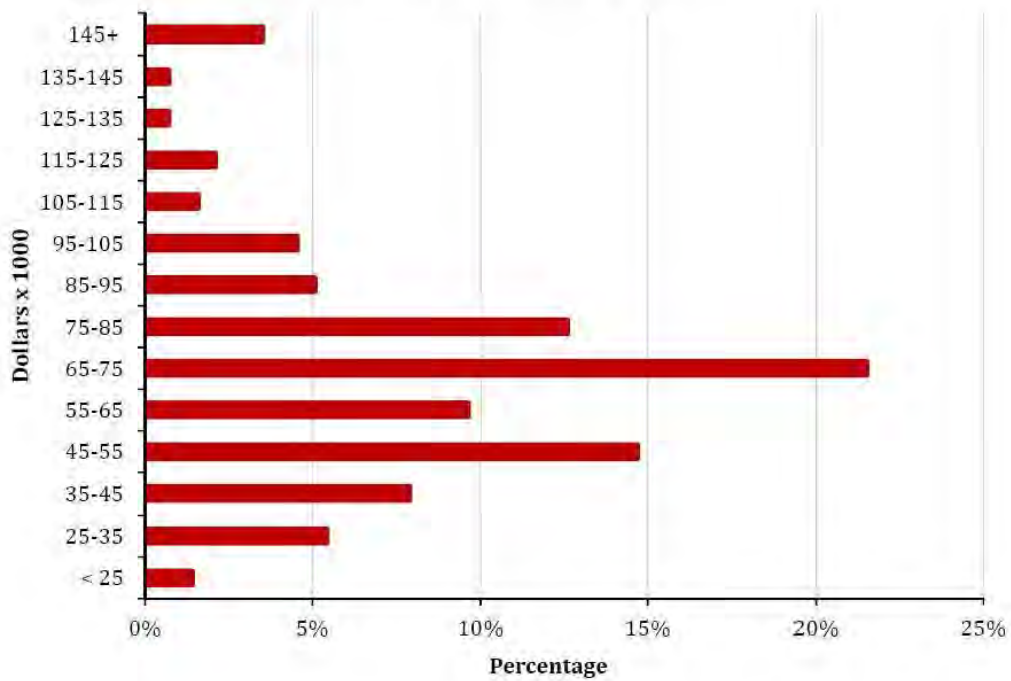
Fig. 8. Full-Time BCaBA Annual Income



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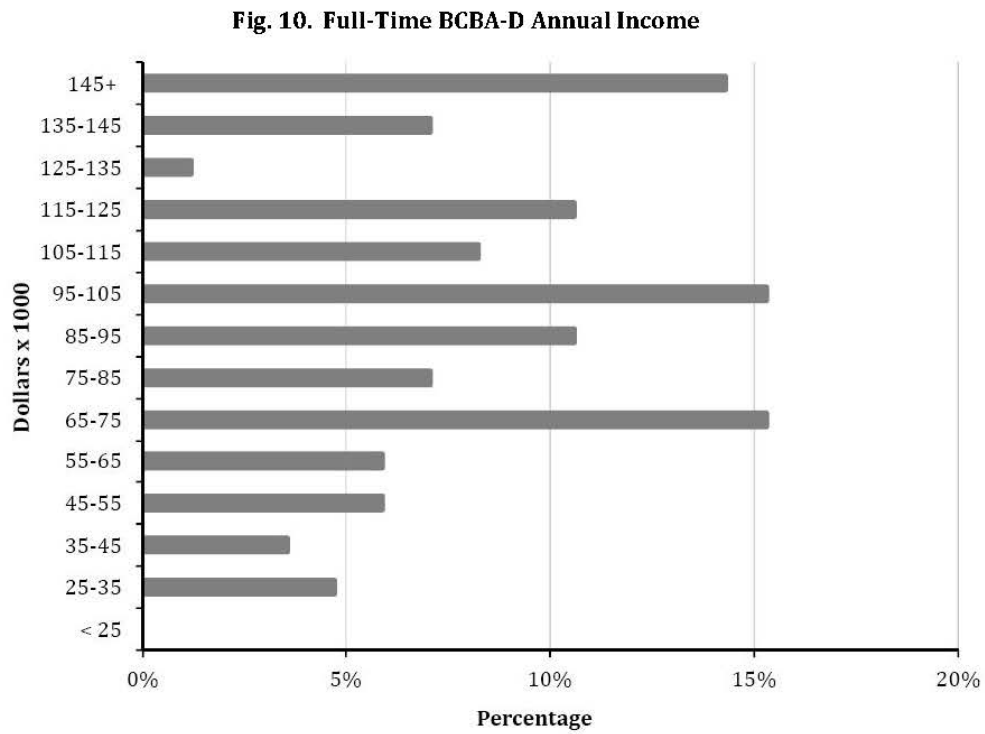
Figure 9 shows the total annual professional income for BCBA's who worked full time in 2014. The modal reported annual income was between \$65,000 and \$75,000, although that accounts for only 21.5% of respondents. Nearly a quarter earned between \$45,000 and \$65,000. However, 30.8% reported earning more than \$75,000, some considerably more.

Fig. 9. Full-Time BCBA Annual Income



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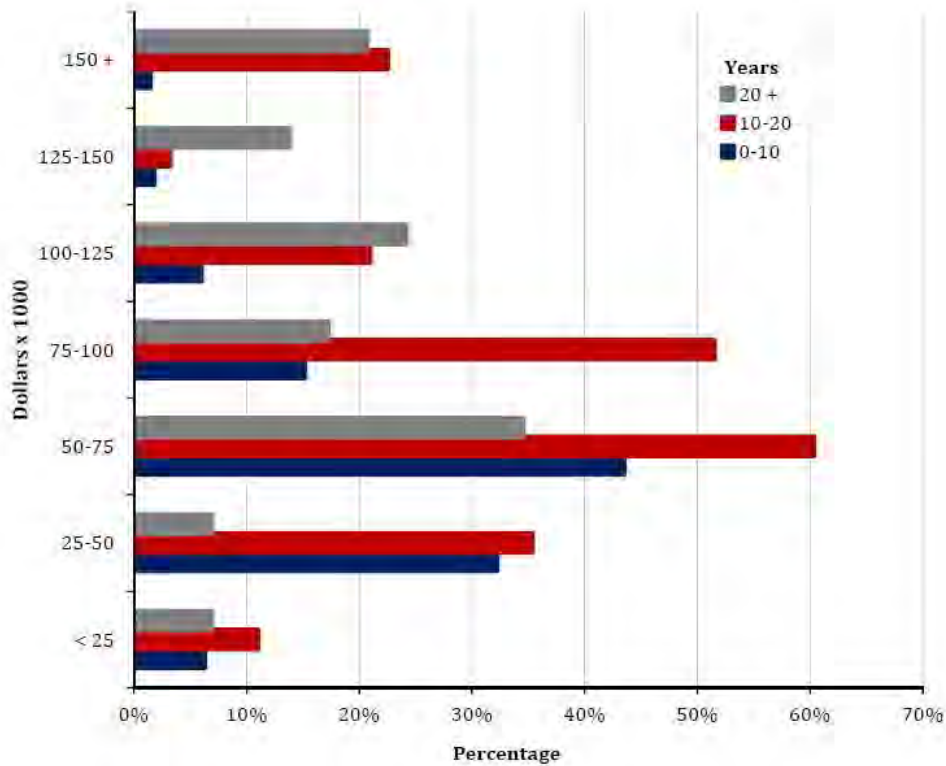
Figure 10 shows the data for BCBA-D respondents who worked full time. Reported annual income from professional sources varied widely for this group. Incomes between \$75,000 and \$125,000 were reported by 44.9% of respondents, with 19.8% reporting larger annual incomes. Slightly more than one third (35.3%) reported incomes below \$75,000.



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Figure 11 examines annual income in terms of years of experience in the field for all respondents. The findings make clear that there was a correspondence between annual income and experience. Respondents with fewer than 10 years' experience tended to report lower incomes than those with more experience, and the same general relationship held for those with 10 to 20 years' experience. The highest incomes were reported by individuals with more than 20 years of experience.

Fig. 11. Annual Income of Respondents by Years of Experience

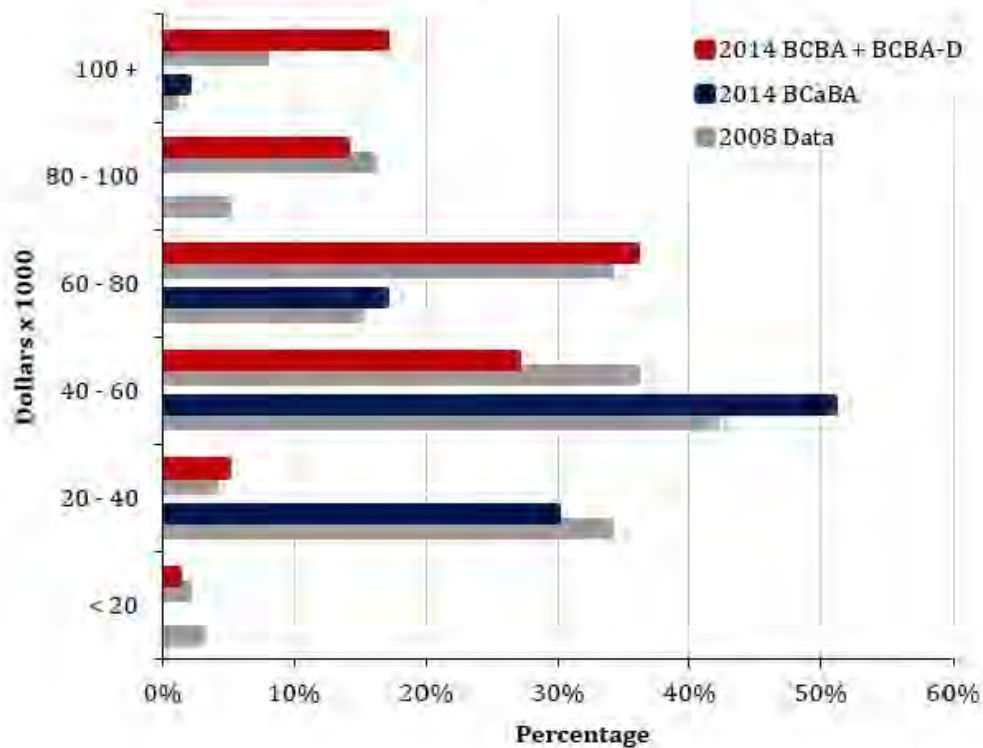


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Figure 12 represents an analysis of 2014 income data compared to the findings from the 2008 survey. Over that 6-year period, the total annual income for BCBA's and BCBA-Ds together generally shifted upward. The percentage of respondents earning \$40,000 to \$60,000 decreased between 2008 and 2014, and the percentage earning \$60,000 to \$80,000 increased slightly. Although the 2014 percentage in the \$80,000 to \$100,000 category dropped slightly from 2008, the percentage reporting annual incomes of over \$100,000 doubled.

BCaBAs also reported an increase in annual income. In 2008, more than one third reported earning between \$20,000 and \$40,000. That percentage dropped slightly for 2014, but the percentage earning between \$40,000 and \$60,000 increased by a larger proportion. There was also a slight increase from 2008 to 2014 in the proportion of respondents reporting annual incomes in the \$60,000 to \$80,000 range.

Fig. 12. Annual Income Comparison Between 2008 And 2014

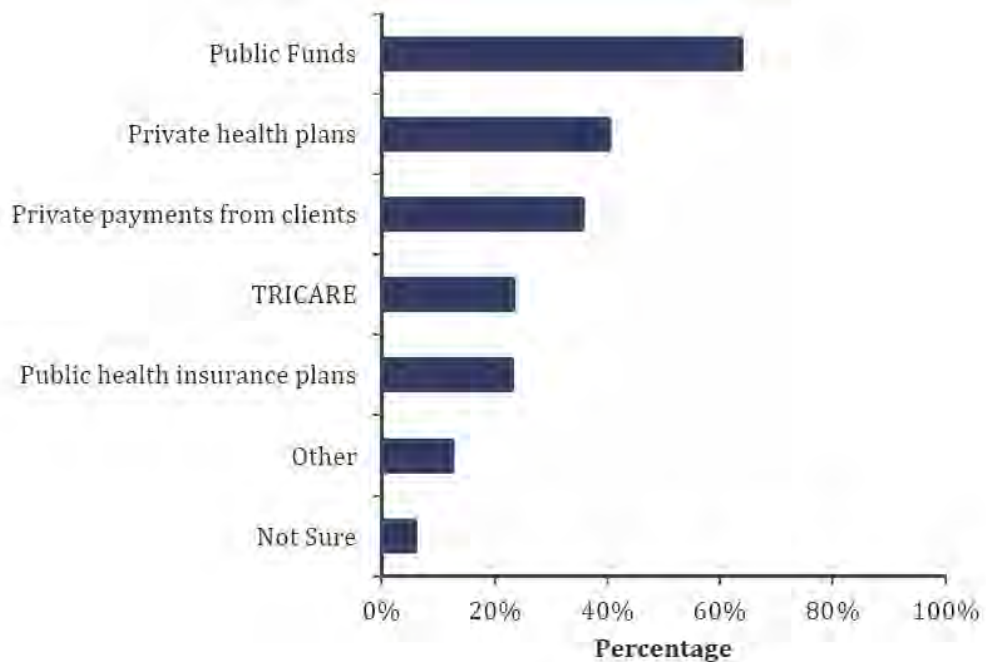


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Sources of income

Figure 13 shows the different sources of income combined for all certificants. About two-thirds of respondents reported that funds from public sources of some sort (including public schools and state developmental disabilities or rehabilitation systems) accounted for at least some of their income. However, the data indicated that other sources of funding also contributed substantially to respondents' incomes, including private health insurance (42%), TRICARE (the U.S. military's healthcare benefit program; 21%), and public health plans (Medicaid and Medicare; 22.5%). Note that these figures represent the percentage of respondents who indicated that they received some income from the sources shown, not the proportions of their incomes they received from those sources.

Fig. 13. Sources of Income

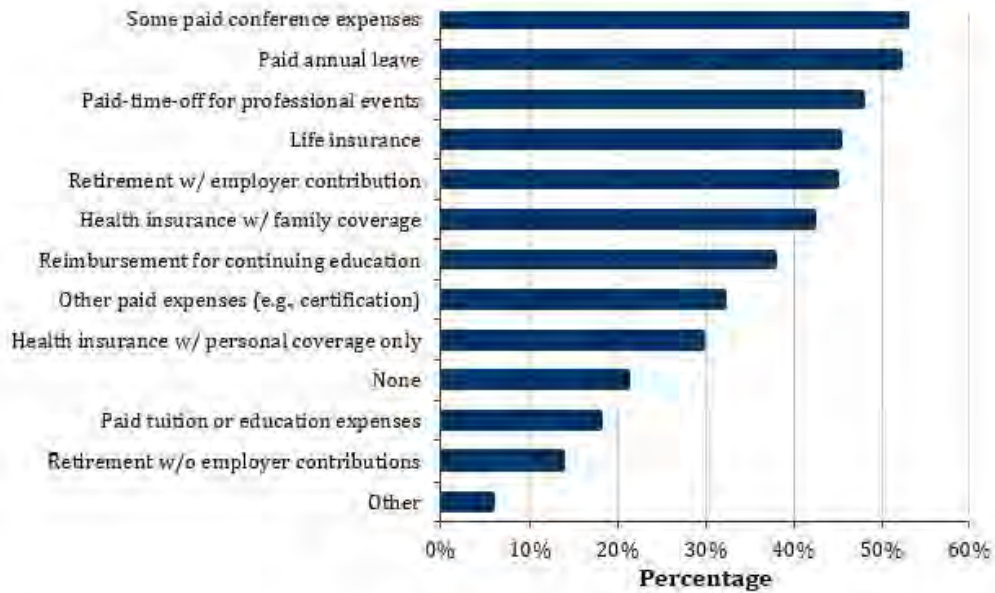


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Employment benefits

Employee salaries are often supplemented by a variety of benefits that have economic value. The survey asked respondents to indicate the benefits associated with their employment, and Figure 14 summarizes their responses. A number of benefits were reported by close to half or more of all respondents, including paid annual leave, health insurance, life insurance, employer retirement program with employer contributions, paid time off to attend professional meetings, reimbursement of some expenses associated with those meetings, reimbursement of continuing education expenses, and more. The benefits were not generally different than those reported in the 2008 survey.

Fig. 14. Types of Benefits Reported by Respondents



Another question examined the health insurance status of respondents who did not have employer-provided health insurance. Almost half (46%) were covered by someone else's policy, but 37% reported purchasing their own coverage.

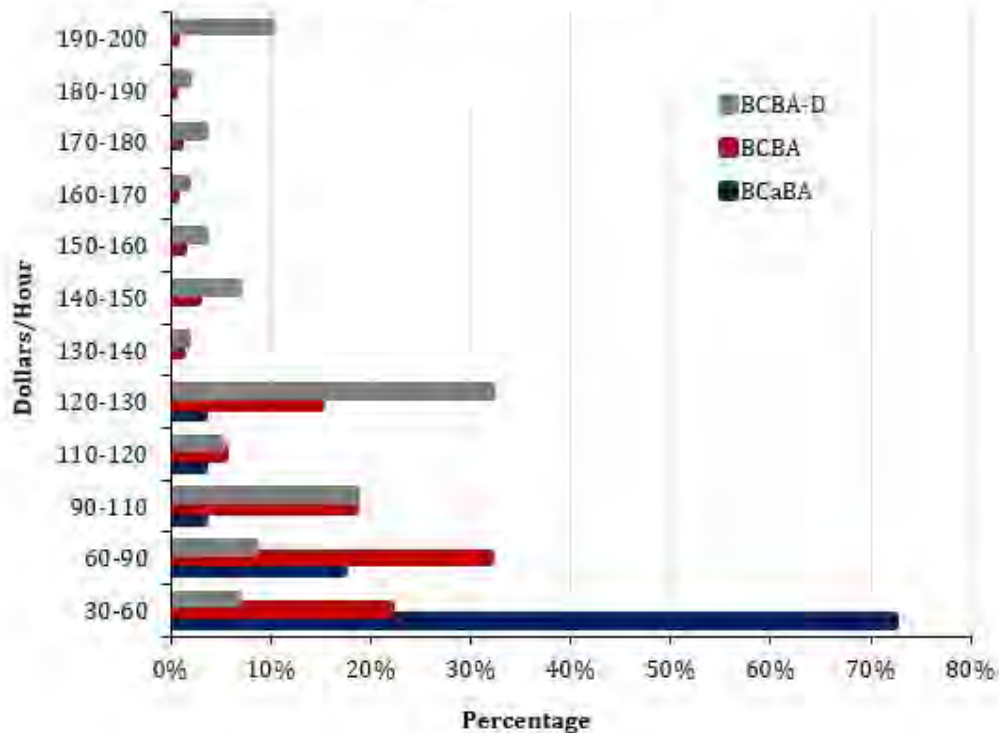
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Fees charged for services

Figure 15 shows the hourly fees respondents charged for their services. The data reveal that fees varied widely within and across certificant categories. For BCBA's and BCBA-D's together, for example, most fees ranged from \$30 to \$130 per hour, although some charged higher fees. The survey did not pursue the factors that might explain such a broad range.

Individuals holding the BCaBA credential may not practice independently of supervision by BCBA's or BCBA-D's, and it might be expected that their hourly fees would be considerably lower than those of BCBA's and BCBA-D's. Most BCaBA respondents reported fees ranging from \$30 to \$60 per hour.

Fig. 15. Fees Charged for Services

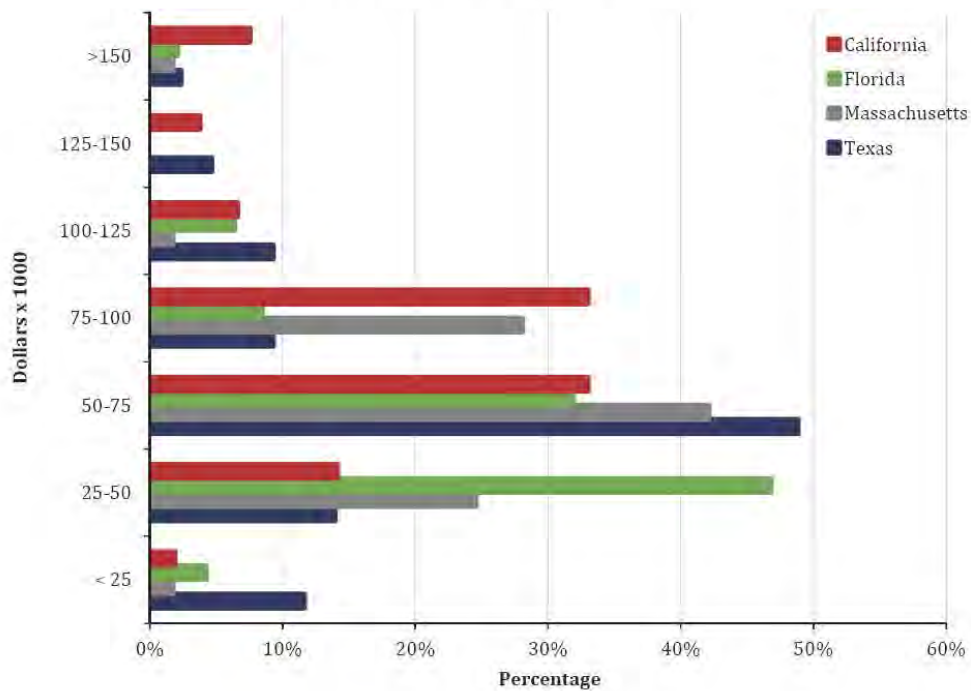


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Regional variations

Most states had too few respondents to provide a detailed picture of variations in annual incomes by state or region. Figure 16 shows annual income for the four states with the greatest number of respondents. The data reflect income for BCBA's only, the largest cohort. In general, it seems that 2014 incomes were lowest in Florida and highest in California, although the data were quite variable across the four states and the income ranges.

Fig. 16 BCBA Regional Annual Income



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DISCUSSION

Using 2014 as the reporting year, this survey provides a needed update to the 2008 examination of the employment circumstances of BACB certificants. In addition to the fact that the number of U.S. certificants nearly tripled during that interval, the field changed in other significant ways. The standards for obtaining and maintaining BACB certifications increased to incorporate more coursework, updated examination content, a more demanding ethics code, specific supervisory requirements, and other improvements. A new BACB credential – Registered Behavior Technician™ – was offered starting in 2014, lending a degree of professionalism to another level of ABA practitioner. It is too early to tell how that new paraprofessional credential will impact the roles and employment circumstances of BACB certificants.

Major changes also occurred in the public policy arena over the last six years. Statutes, rules, regulations, and policies were developed or adapted to incorporate the BACB credentials and the expertise they signify. Employment opportunities increased and job responsibilities expanded as a result. Additionally, the field entered a transition from voluntary professional certification as its sole credential to mandatory government-issued licenses or other credentials. In all states that have adopted laws to license or otherwise regulate ABA practitioners to date, BACB certificants should qualify for the state-issued credential, but most states have additional requirements (e.g., criminal background checks, passing a state jurisprudence exam); some limit the BACB certificants who qualify (e.g., to BCBAAs); and some have other qualifications. The consequences of emerging state-by-state laws and regulations are not yet fully evident, and it will be some years before this chapter in the field's evolution is concluded. It is clear, however, that there are important differences in requirements for practicing ABA from one state to another, and some of those differences will have economic impacts.

Another important change in the context of ABA practice is a sustained, national political effort to secure coverage of ABA services for people with ASD by private and government-funded health insurance. That initiative, largely spearheaded by Autism Speaks and other consumer advocacy groups, has succeeded to the point that at this writing 41 states, the District of Columbia, and the U.S. Virgin Islands have such statutory requirements. That change has obvious implications for ABA practitioners, particularly through increasing sources of funding for credentialed ABA practitioners and regulation of their practice.

This preliminary analysis of findings of a survey covering 2014 suggests that all of the foregoing influences served to increase employment opportunities for BACB certificants since the 2008 survey. The primary evidence for that observation is the general increase in full-time annual income at each level of BACB certification. That fact and the aforementioned public policies likely contributed substantially to the increasing demand for ABA services, built support for ABA training programs within higher education institutions, and increased the availability of credentialed ABA practitioners to employers and consumers. Those factors in turn contributed to the continuing demand for credentialed ABA professionals and the income they can generate in the marketplace.

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The survey's findings on hourly fees charged by the three classes of BACB certificants are suggestive, but perhaps not sufficiently revealing to guide decisions by individual practitioners or funders of services. The problems are that the proportion of BACB certificants who completed the survey was relatively small, the reported hourly fees varied widely within each level of certification, and the survey was not constructed to query the reasons for that variability. Given those limitations, the measures of central tendency reported here should not be taken as representing typical hourly fees. That topic may warrant a more targeted survey effort.

Despite the demand for ABA professionals, survey findings indicated that only about three-quarters of respondents worked full time during 2014, although less than 3% did so because they could not find full-time work. The fact that 17% of respondents chose to work part time may indicate that most are in the early stages of their careers and are also trying to accommodate family and other demands on their time. Some may be enrolled in undergraduate or graduate studies. The considerable need for BACB certificants may provide reassurance that full-time work options will remain available.

The survey verified the findings of the 2008 survey and other sources that the majority of BACB certificants are directly or indirectly involved in providing or overseeing services to individuals with ASD. There are many underlying factors, such as increased funding for ABA services through public and private health insurance. The strong financial support for ASD services is in part driving the interests of students and the focus of many training programs in behavior analysis.

That rosy picture does not extend to other client populations that can benefit from ABA services, however. Service programs for people with intellectual and other developmental disabilities, for example, often lack adequate financial support and credentialed ABA professionals. A future survey might examine differences in the financial incentives among the field's varied specialties, along with the ramifications for professional training and practice.

The basis for predicting continuing growth in the annual number of new BACB certificants is well established at this point. Although that is encouraging in many ways, it is important to consider the effects of that growth on the economic aspects of professional practice, among other dimensions. For instance, what is the demand for individuals at each level of certification and registration to serve different client populations? What are the effects in the professional marketplace on salaries and consulting fees? Is the earning potential of professional behavior analysts too high in some areas of service and too low in others? What might the field do to manage the production of appropriately credentialed professionals and paraprofessionals in ways that meet the needs of different communities of interest? These are only a few of the questions that bear on the future economic prospects for ABA practitioners.

APPENDIX E ARTICLE ON APPLIED BEHAVIOR ANALYSIS

Therapy helps ease autism

By Tara Bannow Feb 16, 2014 at 04:44PM

Derek Sauter rose from his pew, made his way to the front of his congregation and began his speech:

The churchgoers were nervous.

His mom, Jill Sauter, watched from the front row — too anxious to get emotional.

She'd been helping her 17-year-old son prepare for the Father's Day speech for weeks, even coaching him along as he practiced the short walk from his seat to the podium. This was a boy they'd watched grow up, but whom many had never heard speak. A boy they'd seen throw tantrums during services. Who would kick the men assigned to watch him, tear their glasses from their faces, yank their ties off their necks. He'd rip pictures off of the walls and run to the bathroom just to lift the toilet lid above his head and drop it to the floor, reveling in the sound of shattering porcelain.

"One of the men was a plumber, so he just started bringing extra tank covers, and he would quietly go in and replace them without telling anyone," Jill said.

As a 2-year-old, Derek was diagnosed with autism spectrum disorder, a complex developmental condition that impairs individuals' abilities to communicate and interact and often involves unusual behaviors and rituals, some of which can cause harm to oneself and others. Centers for Disease Control and Prevention estimates put the U.S. autism rate among children at around 1.1 percent, and Oregon has among the highest rates in the country, with state Department of Education numbers showing a public school autism rate of about 1.5 percent.

The Bend teenager — moving through his words a bit too quickly but maintaining his composure — praised his dad, Bob Sauter, and all the men of the congregation who had been like dads to him. He thanked them for their patience, kindness and unconditional love. By the time he returned to his seat, several audience members were in tears. "They were like 'I remember him,'" Jill said. "They remembered."

For most of his life, Derek, now 21, has received applied behavior analysis (ABA), a widely accepted, intensive form of autism therapy experts say reduces unwanted behaviors and improves communication skills.

ABA is an expensive form of therapy that most Oregonians currently are forced to do without, as most insurance companies don't cover it. That means many kids with autism end up relying on special education in public schools to try to improve their communication skills and reduce problematic behaviors.

That's about to change. Oregon lawmakers last year approved a measure that puts the state among 34 others, plus Washington, D.C., that require private and/or public insurers to provide coverage for ABA therapy. The new law — which takes effect in 2015 for some public plans and 2016 for commercial plans — covers up to 25 hours per week of ABA therapy for kids who begin treatment before age 9.

But there are still many questions ahead, including who will have to shoulder the costs of the insurance mandate and whether it will extend to low-income Oregonians.

Derek underwent up to 30 hours per week of ABA therapy, starting with learning simple prompts and words and progressing to life skills like identifying dangerous situations.

"What you're trying to do is rewire the brain," said Derek's father, Bob. "You know how stroke victims will need to learn to walk and talk again? ABA works similar to that in that it reprograms the mind to do things."

'A finger-pointing game'

Research has found ABA to be most effective when initiated as early as possible — ideally before age 4 — through an intensive form of the therapy.

Currently, though, few autistic children in Oregon are getting ABA, which can cost roughly \$20,000 to \$50,000 or more.

The financial barrier drives many families with autistic children to rely on special education in public schools, which autism advocates say places an unfair burden on schools and results in inadequate intervention for kids with autism at a crucial period in their development.

Others accept the minimal autism therapy their private insurance covers, although that's generally not ABA.

"It's been a finger-pointing game," said Paul Terdal, policy chair for the Oregon chapter of Autism Speaks, an autism advocacy organization. "Insurance companies say, 'Go to your schools.' Schools say, 'Go to the insurance companies,' or 'Families, you should deal with this yourselves. Why can't your kid behave?' And nothing really gets solved."

Or families fight for coverage. Several families have found success in obtaining coverage for ABA by taking their insurance companies through the administrative appeals process or — when that doesn't work — filing lawsuits.

Autism advocates have argued for years that Oregon's laws already mandate ABA coverage under the state's mental health parity act and a law that requires coverage of treatments for children with developmental disorders, including autism. The new law, they say, simply serves to remove the loopholes and establishes Oregon's own licensing system for ABA providers.

"Parents and families shouldn't have to be bankrupting themselves to provide this," said Tobi Rates, executive director of the Autism Society of Oregon, an organization that supports and advocates for individuals and families with autism. "They shouldn't have to be going through administrative appeals or court cases, lawsuits, in order to get this coverage."

ABA in action

On a recent weekday afternoon, ABA provider Jenny Fischer files into a classroom at the School of Enrichment in Bend, which provides early childhood education. There, a tiny, chatty girl waits for her atop a stuffed dog two times her size.

"Jenny! Pet him!" the preschooler, whose parents asked that she not be identified, shouts in halted speech.

Fischer obliges, asks a few questions about the girl's new friend and her troll doll sitting nearby and then gently coaxes her to a round rug near the center of the room where they begin their session. First, the girl creates her schedule by choosing activities denoted on pictures and attaches them to a Velcro board.

"Do you want to sit on the giraffe or the alligator?" Fischer asks.

Shares

Fischer is the only board-certified behavior analyst (BCBA) in Central Oregon. Currently, the Florida-based Behavior Analyst Certification Board certifies university- and college-based training programs and credentials those who have taken them as well as completed supervised experience and passed an exam.

That doesn't mean she's the only one providing ABA therapy, though. BCBAs like Fischer work with trusted teams of so-called interventionists who do most of the in-the-trenches work with the kids. Fischer brings together reams of research to design treatment protocols for her clients, and the interventionists follow those plans as they work with the clients.

Every other week — like today, for example — she sits in on the sessions and makes sure they're going as planned.

ABA's interventions are based on a number of different learning principles designed to improve behaviors and increase communication skills. Positive reinforcement is an important component of the therapy.

Shares

The girl, who has autism, is receiving the intensive form of ABA therapy, which Fischer said can go for up to 40 hours per week. Depending on the child's skill level, the sessions can take place in a home, at a day care or preschool or elsewhere in the community where the student can observe his or her peers interacting. Intensive ABA therapy relies strongly on parents to continue the training even when the therapy is not in session, Fischer said. She also collaborates with other professionals like speech therapists and teachers in schools.

"One of the critical features of behavioral analysis is that it's really focused on the needs of that individual and seeing each individual's situation as very unique," Fischer said. "What would be more beneficial to make meaningful change for that person?"

The girl's session includes periods of structured learning sandwiched between periods of play. To begin, the girl, Fischer and interventionist Ashlee Partridge each hold an object. The girl is tasked with identifying the objects based on who is holding them.

"Who has the ball?" Partridge asks. The girl answers correctly.

"Very smart! So smart!" Partridge praises enthusiastically, then puts on an inquisitive expression, "And who has the giraffe?"

"I do!" the girl says.

The instructors speak slowly and clearly, and each correct answer the girl gives is met with repeated, enthusiastic praise.

Sometimes, amid the stream of questions, the girl seems to lose interest. Her eyes leave the circle and she twists her body to gaze around the room, not focusing on anything particular.

When this happens, Fischer gets up and positions herself squarely in front of the child. She makes eye contact and touches the girl's arm in an effort to draw her back to the activity.

Finally, Fischer dangles the bait she hopes will entice her student to keep at it: a game of hide-and-seek if she just finishes the task at hand first. It works.

Rates, of the Autism Society of Oregon, has two sons on the autism spectrum. Her older son has a milder form that did not require ABA therapy. Her 9-year-old, Jacob, however, is much more severely affected, and can't speak. He began ABA at age 3.

ABA is like a gateway that addresses foundational behavioral issues that prevent the child from progressing and learning, Rates said. Once those behaviors are overcome, the child can benefit more from things like occupational therapy, speech therapy and physical therapy, she said. Jacob's first hurdle, for example, was simply his inability to sit in a classroom and learn.

"The first thing they worked with my son on was getting him to sit in a seat, and to sit there," Rates said. "It started at 2 seconds and then 5 seconds and on and on to where he could sit and learn."

Fischer, who also works with children with other special needs and behavioral issues in addition to autism, said her current clients are either lucky enough to have ABA covered through their insurance or they're paying for it out-of-pocket.

More often than not, though, potential clients are referred to her by their doctors but ultimately learn they can't afford the therapy, even if she offers it on a sliding fee scale.

"Oftentimes, right now, I get the calls but it's not able to become a reality," she said. "It's very hard."

Wrangling for coverage

Paul Terdal's years-long battle for ABA coverage in Oregon is at once personal and professional. His two sons, ages 6 and 8, both have autism, and he's watched both of them benefit from the therapy.

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The younger son — whose name Terdal, of Portland, declined to provide — was diagnosed at age 2 with a form of regressive autism in which he seemed to develop normally, but would then lose skills. His sensory processing also was out of whack. Blood tests that involved poking his fingers with needles didn't spur reactions.

"Most kids, you poke them with a needle, they're going to cry," Terdal said. "He didn't care because his sensory processing was so far out of line that he just didn't feel the needle."

Now, following four years of roughly 20-hour-per-week ABA therapy, his son's IQ has gone from 86 to around 137, and his communication skills — once the occasional grunt or cry — have progressed such that he can understand people and express himself clearly through speech, Terdal said.

"I can tell that he has autism," he said. "I can see that the characteristics he has are still consistent with it. But if you didn't know, it would never occur to you. He's bright, he's social, he's energetic."

But getting his insurance company to cover that treatment was a nightmare, one that inspired Terdal to dedicate the past four years to helping families like his get their insurance providers to cover ABA therapy, a service he argues Oregon's laws already required.

His battle started with his own family. In June 2011 — confident in his interpretation of the law and prepared to defend it — Terdal formally disputed his denial letter from Kaiser Permanente to cover his sons' ABA therapy.

"I simply said, 'I know you don't think you cover this treatment; I want you to process a referral for it anyway, and if you think you have a basis for denying coverage, you can deny it in writing and we'll go through that appeals process,'" he said.

Kaiser, which last summer agreed to pay \$9.3 billion to families who were denied coverage for ABA therapy to settle a class-action lawsuit, told Terdal that the providers he had chosen were not properly licensed. He remedied the problem by finding a licensed provider. Then Kaiser retorted that even though its doctors recommended ABA therapy, it still wasn't medically necessary. So Terdal had the Oregon Insurance Division appoint an outside expert to determine whether ABA was necessary. It was.

Michael Foley, communications manager for Kaiser Permanente, said the company's criteria for considering a treatment a medical necessity are that the patient exhibit "significant, measurable and sustainable improvement as a result of receiving services" and that a treatment plan be developed.

By December 2011, Terdal said, he had a binding order to Kaiser to pay for ABA therapy for both of his boys.

"My assertion, then, is that this has really been required all along," he said.

The biggest roadblock to coverage — one that the new law is designed to alleviate — is credentialing. Because Oregon doesn't have its own licensing board for ABA providers, insurance companies have denied coverage on the basis that the providers, BCBA's and interventionists, are not licensed in Oregon.

"We have licenses in Oregon for everything," Rates said. "You need one to braid hair professionally. Not having a license in Oregon creates a number of problems."

The new law calls for the creation of a behavioral analysis regulatory board in 2014 that will license ABA providers in Oregon. It also requires licensing for the interventionists who work with BCBA's like Fischer.

Autism advocates argue that two Oregon laws mandated ABA coverage prior to the 2013 law. The first: the state's mental healthy parity act. Passed in 2005, that law requires that insurers cover treatment of mental or nervous conditions at the same level and with no more restrictions than other medical conditions. The second is a 2007 law that requires coverage of medically necessary services for children with pervasive developmental disorders, including autism.

Shares

Since getting his own situation worked out, Terdal has helped more than 100 Oregon families navigate the maze of loopholes that had prevented them from getting coverage for their children's ABA therapy. In some cases, that means guiding them through the insurance company's internal and external appeals processes. In others, it's lawsuits. He's helped some families get their names attached to an ongoing class-action lawsuit filed in May 2013 against Providence Health Plan for refusing to cover ABA therapy.

When families don't get ABA coverage, many of them turn to the public school system.

Terdal estimates that public schools in Oregon spend \$200 million per biennium on special education and community services for adults and children with autism, a burden he says would likely be reduced if kids are able to get necessary treatment earlier in life.

In Rates' case, when her son Jacob was eligible for special education services through the Clackamas Education Services District, the then-4-year-old was getting 10 hours per week, a number she said has since been about halved. Rates estimates roughly 2 hours per month of that was ABA therapy, far less than the 20 to 40 hours per week of ABA that's recommended for kids at his age and level of severity, Rates said.

"To try and say 'Well the schools need to provide that, but we're not going to give them the resources to do it' is giving the schools an impossible task," she said, "and our kids are the ones who are suffering because of it."

Affordable Care Act caveat

The Affordable Care Act outlined what's called essential health benefits, a list that includes 10 categories of conditions that insurance plans must cover. States have their own lists of essential health benefits, some of which differ from the federal government's list.

Those lists were basically locked in on Dec. 31, 2011. If a state mandates any condition after that point, that state must pony up the money to pay for the additional cost of covering that treatment under insurance policies.

Here is where the question of whether Oregon's ABA mandate is a new one becomes crucial. It's impossible to know how much money is at stake, but it's enough to make state officials nervous.

The Oregon Insurance Division, unsure of how exactly to interpret the state laws as they pertain to ABA coverage, has called upon the U.S. Department of Justice to make a final call on whether insurance companies were legally obligated to cover ABA therapy prior to the 2013 law, said Berri Leslie, deputy administrator of the state Insurance Division.

"They're interpreting, really, whether or not ABA was part of the essential health benefits package," she said, "and so their guidance will help us come to an opinion about a lot of outstanding complaints in cases we have."

Julie Kornack, public policy analyst for the Center for Autism and Related Disorders, an organization that provides ABA therapy, said in her view, Oregon's mental health parity law already required coverage for ABA before the 2013 law was passed. But even if the DOJ interprets otherwise, she said the cost difference between providing a policy that covers ABA and one that doesn't is negligible.

In other states that have implemented laws requiring ABA coverage, the additional cost has worked out to about 33 cents per policy member per month, Rates said.

"So, something that's going to cost a family \$25,000 or more per year, you spread that risk out among the policy pool, it's 33 cents per month," she said, "If you don't get these treatments, you're overburdening the schools, and in time, (those with autism are) not living productive and meaningful lives, which is the goal."

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Medicaid coverage in question

Among the questions about the law still waiting to be answered is whether it will apply to older kids with autism.

A clause in the 2013 law directs the group that decides what's covered under Oregon's Medicaid program to consider adding ABA therapy to its list of covered treatments. (Medicaid is not among the public plans required to cover ABA under the new law.)

An earlier incarnation of the Health Evidence Review Commission first considered covering ABA therapy for autism under the Oregon Health Plan in 2008 but decided there wasn't enough evidence proving its effectiveness.

This time around, the HERC appears poised to approve the therapy, at least for some OHP beneficiaries. A HERC subcommittee last September reviewed a number of studies on ABA and issued a draft recommendation that OHP cover up to 40 hours of ABA per week for children ages 2 through 12 years. The subcommittee did not recommend covering the therapy for people over the age of 12, however, citing insufficient evidence of its effectiveness among older children and adults. (The subcommittee could change its recommendation to the commission at a meeting in February.)

The recommendation provides initial coverage for a six-month period, with ongoing coverage provided based on demonstrated progress.

Since the recommendations came out, many autism advocates as well as experts brought in to advise the subcommittee have spoken out against them, arguing there shouldn't be an age limit to receiving ABA therapy.

Bob Joondeph, executive director of Disability Rights Oregon and the only subcommittee member who voted against the age limit, said one of the challenges of autism is that it's a highly individualized disorder, and each person responds to therapies differently.

"Saying 'This makes sense for an 11-year-old as opposed to a 12-year-old as opposed to a 13-year-old' doesn't make sense to me," he said. "It seems to me that if you have a person who is on the autism spectrum, and they have certain behaviors that indicate ABA may be an effective treatment for them, they should have the ability to get a trial of that treatment to see if it is helpful or not."

Some have criticized the subcommittee's methodology for arriving at the recommendation, arguing that the group wasn't following its own guidelines, didn't review the strongest research available and didn't heed the advice of experts called upon to weigh in.

The main area of disagreement concerns the type of research that can be used to evaluate a treatment's effectiveness. The HERC staff abides by strict standards that govern which studies it can use, with randomized controlled trials (RCTs) being the most coveted form of evidence. In RCTs, participants are randomly assigned to different groups, with some receiving the treatment being tested and others, the control group, not receiving that treatment.

Autism advocates argue that ABA therapy doesn't lend itself to the RCT format, because those who can benefit the most from the therapy would ideally be receiving it during their early, formative years. They say that enrolling in a study in which subjects may not be receiving the therapy could have detrimental effects.

"My child needs help now, I'm not going to participate in a study where they may or may not get help and lose that time," Rates said. "There's just no parent who would do it, and I don't think it's ethical for a researcher to ask them to do it."

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They also argue that ABA is too individualized a therapy to compare groups in a study.

The subcommittee's review did include six small RCTs, but the study results were mixed on whether the ABA therapy improved functioning in the test subjects, especially among kids older than 12. While HERC staff members say those studies prove the RCT framework can be applied to ABA, critics say there are better studies to choose from that would have yielded far different results, they're just not RCTs.

"There's tons of data with children, adolescents and adults in general on this general issue," said Eric Larsson, executive director of clinical services for the Lovaas Institute Midwest in Minneapolis, which provides behavioral intervention programs like ABA, "but when you narrow it down to a highly restricted data set, it appears as if the opposite conclusion is warranted."

The other forms of studies included in the HERC's review did report positive results of the ABA therapy, but the HERC places less weight on studies that are not RCTs.

Larsson, who has been providing ABA therapy since the late 1970s, was among the experts the HERC brought in to advise the subcommittee in making its recommendation. The best way to study ABA's effectiveness, he said, is through single-subject studies, in which the effects of a treatment are observed on a single subject.

But Alison Little, director of clinical affairs for the Center for Evidence-based Policy at Oregon Health & Science University, said single-subject studies carry a high likelihood of bias. Little and her colleagues at the Center are responsible for gathering the studies that the HERC uses to evaluate treatments.

"It is possible to do them very well, but most of them are not done well and without good controls," she said.

Larsson, by contrast, said there are many issues — global warming, for example — that can't be studied using RCTs, but that doesn't mean scientists aren't studying them.

"In our case, the kind of study they're talking about would cost about \$10 million and would only answer one of about 100 questions that are open as not having been studied by randomized controlled studies," he said. "Nobody's going to spend \$10 million doing a study. They may as well be treating the kid."

Three experts were called upon to provide their opinions on the matter for the subcommittee: Larsson, Katharine Zuckerman, assistant professor of pediatrics at OHSU, and Eric Fombonne, director of OHSU's Autism Research Center. The age limit of 12 would disproportionately affect blacks and Latinos, as the average age of diagnosis is later in those groups compared with whites, Zuckerman said.

Terdal, the parent and autism advocate, said he feels the subcommittee disregarded testimony from "top-notch, world-class experts."

Some have questioned whether Little herself is biased on the topic, having served as an expert witness for the state of Florida when it was sued for refusing to pay for ABA therapy under its Medicaid program. Florida ultimately lost that case.

Joondeph, the subcommittee member, said the materials Little presented to the group in this case were comparable to data she's gathered for other cases.

"That said, the fact that she acted as an expert witness in Florida is troubling because it gives the appearance of bias," he said.

Little — who was paid \$200 per hour by the state of Florida, according to court documents — said she was simply discussing what the evidence showed. Likewise, in the current case, she said her job is simply to interpret evidence.

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The ABA therapy coverage recommendation will go before a different HERC subcommittee in March, and before the full HERC for an official vote in May. Any new coverage guidelines the HERC votes on would take effect between October 2014 and April 2015.

While the public discussion about covering ABA has focused on the evidence, Joondeph said he thinks the underlying issue is simply the fact that it's expensive.

"Whether it's articulated or not, the impediment to ABA coverage has been the thought that the costs would override the efficacy," he said. "In other words, it's so expensive that it would be asking either the public or ... other people who are paying for insurance policies to pay for this service."

'Innocence around us every day'

When Derek Sauter was just 4 years old, an autism specialist with the Bend-La Pine School District told his parents that their son would need to be institutionalized by the time he reached his teens.

The specialist also recommended that Jill and Bob Sauter start teaching Derek sign language, as he hadn't yet begun to form words. And if he couldn't speak, they were told, he couldn't be potty trained.

"It was pretty sad," Jill said. "I was just like, 'This is going to be our future: never going anywhere because he's going to be out of control.'"

It was 1995 and the Sauters had just moved to the area. Derek lasted just days in the Bend-La Pine School District before his parents pulled him out. The first sign that it wasn't going to work was when they learned the then-head of the special education program had taken just one chapter of one college course worth of education in autism.

"She said, 'I'll have to read up about that,'" Jill said. "We felt like they were really behind the times. I couldn't be just putting him in school waiting for them to figure out what ABA was."

Initially, a family friend traveled periodically from California to oversee Derek's ABA program. Because he still was not speaking or writing, it started with 20 to 30 hours per week of pointing to pictures and the instructor placing his or her hand over Derek's to teach him to perform simple tasks. Derek was not an easy kid to work with at the time. He had taken to ripping up any paper he came across, enjoying the sound it made. The family could have no pictures on the walls, because he'd throw them down to hear the glass shatter. The tutors had to wear long-sleeved shirts to protect their skin from the inevitable scratching. And the work was so intense they could only work two-hour shifts at a time.

"One of the girls had to take off a month before her wedding because she said, 'I can't have these scratches all over my hands in the pictures,'" Jill said.

The lessons eventually progressed to include photos of Derek's tutors making facial expressions and instructions such as "show me a surprised face" or "show me a sad face."

The lessons also included pictures of objects — an apple, for instance — that he would have to identify. Derek was taught to count and to read, the lessons always placing a heavy emphasis on repetition. There were also lessons in everyday life skills that Derek lacked, such as dressing himself. And he had to learn about danger, and who is a stranger and who's not.

"Autistic kids have no sense of fear," Bob said. "They have no sense of distrust. You walk up to one and say, 'Come with me,' and they'll go."

Getting the therapy paid for, however, required countless letters back and forth with the insurance company. Bob, a retired FBI agent, remains insured through Special Agents Mutual Benefit Association, which contracts with different insurance companies who handle the claims.

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Initially, the company decided ABA wouldn't be covered, as it was considered a mental health issue. Bob sent them articles, studies and court cases in which autistic clients won against their insurance companies. Finally, the company gave in, with the caveat that Bob provide semi-annual progress reports written by a board-certified professional.

Fast forward more than a decade and a grown-up Derek greets visitors to his family's home on the outskirts of Bend in rehearsed, halted speech. A wide smile on his face, he responds to his parents' questions politely, with an air of obedience.

He heads upstairs to watch TV and runs back down when Jill calls him. She requests he play a song on the piano. He nods, and sits on the bench without hesitation, breaking into slow but accurate renditions of "Mary Had a Little Lamb" and "Twinkle Twinkle Little Star." When he's finished, he turns to face his clapping audience. Once the applause ceases, Derek gets up promptly and makes his way back upstairs.

Derek will always be autistic, but he can do a number of things his parents say he wouldn't have been able to without his ABA therapy. Not only have his violent outbursts ceased and he speaks clearly, he takes taekwondo classes, goes to the library, plays cards, does chores and can read just about anything, his parents say. And he keeps track of it all on a large calendar that allows him to place Velcro activity cards next to certain hours of the day.

But Derek's disconnect still reveals itself in small moments. The other day, Jill said, she was joking around with her friends. She laughed so hard, tears rolled down her cheeks.

"Derek said to me, 'Sad? Crying?'" Jill said. "He was confused. 'Why are you sad, Mom?' It was like, 'Wow, he recognized that I'm laughing but I'm crying.' That must have been really confusing."

Derek's parents say he'll probably never be able to live alone, and they've learned to be OK with that. After all, Jill said, life with Derek is simpler in some ways than it was with their other kids, ages 27, 31 and 33. At 16, they wanted cars. Derek wanted a Thomas the Tank Engine book.

"With them, too, we always worried about who they were with, who they were driving with and stuff, what they were eating and drinking," she said. "With Derek, we pretty much know what he's about."

Derek is a blessing, said Bob, his eyes welling with tears.

"I mean, we have innocence around us every day," he said. "No guile, no hate — just innocence. And, gee, how many 21-year-olds do you know that would love to go for a drive with their dad just to get a root beer?" •

Autism in America

- About 1 in 88 children in the U.S. has been identified as having autism, according to

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2008 data from the Centers for Disease Control and Prevention.

That's up from 1 in 150 when the CDC performed the same research in 2000.

- Autism occurs among all racial, ethnic and socioeconomic groups.
- Autism is almost five times more common among boys (1 in 54) than among girls (1 in 252).
- A growing number of children are being diagnosed at increasingly earlier ages — 18 percent are diagnosed by age 3.
- The medical expenses of autistic individuals exceeded that of those without autism by \$4,110 to \$6,200 per year.
- In 2005, the average annual medical costs for autistic children on Medicaid was \$10,709 per child — about six times that of children without autism.

What causes autism?

- Researchers still do not know exactly . Science has, however, identified environmental, biologic and genetic factors that may make some more prone to autism than others.
- Research has shown that parents who have one child with autism have an increased risk of having a second child with autism. Studies have also found that both identical twins in a pair are more likely to have autism than both nonidentical twins.
- Autism also tends to show up in people with other genetic conditions , such as Down syndrome, fragile X syndrome or tuberous sclerosis. Also, children born prematurely or with low birth weight are at greater risk.
- A 2008 study linked states with higher precipitation, including Oregon, California and Washington, with higher autism rates. Researchers theorized the connections could include more time in front of TVs, less vitamin D or more exposure to household cleaners, or the rain itself could contain chemicals such as pesticides.
- If taken during pregnancy, prescription drugs valproic acid and thalidomide have been linked to higher autism risk.
- Many studies have investigated a link between autism and vaccines. The research continues to show that vaccines do not cause autism.

Sources: U.S. Centers for Disease Control and Prevention, Archives of Pediatrics & Adolescent Medicine

Graphic: Tara Bannow, David Wfray

Pressure is on for more providers

Oregon will likely need significantly more applied behavior analysis providers to meet the demand for the therapy once the law takes effect in 2015 for public insurance plans and 2016 for private plans.

Jenny Fischer said she is the only board-certified behavioral analyst in Central Oregon, and she estimates there are about 30 in the state of Oregon, although not all of them are practicing.

"We do have fairly low numbers compared to other states," she said. "That will be an issue. We really have to focus on building capacity over the next couple of years as this law rolls out."

There are currently about 15,000 ABA providers certified through the Behavior Analysts Certification Board in the world, said Eric Larsson, executive director of clinical services for the Lovaas Institute Midwest in Minneapolis. That's a "very small bump on the horizon" compared with other health professions, he said.

"It's just a very brand-new, cutting-edge practice," said Larsson, who serves on an international behavior analysis certification board.

The Oregon Institute of Technology announced in September 2013 it would ramp up its ABA course offerings to help meet the anticipated demand for providers in Oregon. The University of Oregon also offers ABA courses.

Photo:



Rob Kerr / The Bulletin "What you're trying to do is rewire the brain. You know how stroke victims will need to learn to walk and talk again? (Applied behavior analysis) works similar to that in that it reprograms the mind to do things," said Bob Sauter, pictured with his wife, Jill, while watching son Derek playing piano at home.



Rob Kerr / The Bulletin Jill and Bob Sauter, of Bend, maintain a box full of paperwork that details nearly two decades of dealing with their son's autism therapy. It contains letters to and from the family's insurance company, newspaper articles and information about autism.



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Rob Kerr / The Bulletin Derek Sauter, 21, has received a form of autism therapy called applied behavior analysis since he was 3 years old. His parents say the therapy has improved his communication skills and eliminated violent outbursts.



Rob Kerr / The Bulletin Jenny Fischer, a board-certified behavior analyst, conducts applied behavior analysis therapy with a preschool-age client in December at the School of Enrichment in Bend.



Rob Kerr / The Bulletin Jenny Fischer, a behavior analyst, works with a preschool-age child at the School of Enrichment in Bend. The behavioral therapy she practices can take place at a preschool or day care, at home or anywhere the child can observe how other children interact.

APPENDIX F OREGON EMPLOYMENT DEPARTMENT GRANT AGREEMENT

STATE OF OREGON EMPLOYMENT DEPARTMENT GRANT AGREEMENT

This Agreement is between the State of Oregon, acting by and through the Oregon Employment Department, hereinafter referred to as "Agency," and **Oregon Institute of Technology**, hereinafter referred to as "Grant Recipient."

Recipient Agreement Administrator

Sara Reuter, Director of Sponsored Projects
Oregon Institute of Technology
27500 SW Parkway Ave. *3201 CAMPUS DR.*
SNR Wilsonville, OR 97070 *KLAMATH FALLS, OR*
97601

Phone: 541-885-1734
E-mail: sara.reuter@oit.edu

Agency Agreement Administrator

Melissa Leoni, Executive Director
Oregon Talent Council
c/o Worksource Portland Metro
7995 SW Mohawk Street
Tualatin, OR 97062

Phone: 503-947-1361
E-mail: melissa.leoni@oregon.gov

1. Legal Basis of Award

Pursuant to ORS 284.290 to 284.297, Agency is authorized to enter into a Grant Agreement on behalf of the Oregon Talent Council to Grant Recipient for the purposes set forth herein.

2. Grant

In accordance with the terms and conditions of this Agreement, Agency shall provide Grant Recipient an amount not to exceed **\$182,177** ("Grant Funds") for the purpose described in Exhibit A (the "Project"). Agency shall pay Grant Recipient from monies appropriated for investment by the Oregon Talent Council. Disbursement of Grant Funds is contingent, as of the time of disbursement, on Agency having received sufficient expenditure authorizations to allow Agency, in the exercise of its reasonable administrative discretion, to make the disbursement.

3. Effective Date and Duration

This Agreement shall become effective on the date this Agreement is fully executed and approved as required by applicable law (the "Effective Date"). Unless earlier terminated, amended or extended, this Agreement shall expire on June 30, 2017.

4. Agreement Documents

This Agreement consists of the following documents, which are listed in descending order of precedence: this Agreement less all Exhibits, Exhibit A (Grant Recipient Proposal; Budget; Metrics and Evaluation Process).

5. Disbursement and Reporting

- a. **Disbursement.** Agency will disburse the Grant Funds to Grant Recipient in quarterly payments upon submission and approval of the Quarterly Progress Report and Quarterly Grant Reimbursement Request forms provided by Agency. Disbursement of the final quarterly payment also requires the receipt and approval of the Metrics and Evaluation Report and Final Report as described in Sections 5.d. and 5.e. below.

b. Pre-award Costs. Pre-award Costs are those expenses incurred prior to the effective date of the agreement that are (i) directly related to and in anticipation of the award; and (ii) necessary for efficient and timely performance of the scope of work. Such costs are allowable only to the extent that the costs would have been permitted if they had been incurred after the effective date of the agreement. In addition, Pre-award Costs shall be allowed only after the prior written approval of the Agency.

c. Quarterly Progress Reporting. Grant Recipient must submit Quarterly Progress Reports beginning the first quarter following the Effective Date of this Agreement and each quarter thereafter until the Project is complete. Quarterly Progress Reports shall be submitted using the format provided by the Agency.

d. Metrics and Evaluation Report. By January 30, 2017 and within 60 days of Project completion, the Grant Recipient must report on the measurable outcomes described in Exhibit A using the Metrics and Evaluation Report format provided by the Agency.

e. Final Report. Grant Recipient must submit a Final Report within 60 days of Project completion. The Final Report must be submitted using the format by the Agency, and must be accompanied by financial information, including an accounting of total Project costs by funding source and includes all receipts, paid invoices or other documentation.

6. Use of Funds, Unexpended Funds

Grant Recipient's use of the Grant Funds provided is limited to those eligible expenditures associated with the performance of the Project as specified in Exhibit A of this Agreement and that are qualified as allowable costs under any regulations governing the source of these Grant Funds. All equipment purchases are hereby approved by the Agency as shown in Exhibit A Budget.

Any Grant Funds disbursed to Grant Recipient under this Agreement that are expended in violation or contravention of one or more of the provisions of this Agreement ("Misexpended Funds") or that remain unexpended on the earlier of termination or expiration of this Agreement ("Unexpended Funds") must be returned to Agency. Grant Recipient shall return all Misexpended Funds to Agency promptly after Agency's written demand and no later than 14 days after Agency's written demand. Grant Recipient shall return all Unexpended Funds to Agency within 14 days after the earlier of expiration or termination of this Agreement.

7. Access and Records Maintenance

a. Access to Records and Facilities. Grant Recipient acknowledges and agrees that Agency and the Oregon Secretary of State's Office and the federal government and their duly authorized representatives shall have access to such financial records and other books, documents, papers, plans, records of shipments and payments and writings of Grant Recipient that are pertinent to this Agreement, whether in paper, electronic or other form, to perform examinations and audits and make excerpts and transcripts.

b. Retention of Records. Grant Recipient shall retain and keep accessible all books, documents, papers, and records, that are directly related to this Agreement, the Grant Funds or the Project for a minimum of six (6) years, or such longer period as may be required by applicable law, following the later of (1) termination or expiration of this Agreement or (2) the date of the conclusion of any audit, controversy or litigation arising out of or related to this Agreement.

8. Default and Remedies.

a. Default. Grant Recipient shall be in default under this Agreement upon the occurrence of any of the following events:

1. Grant Recipient fails to perform, observe, or discharge any of its covenants, agreements, or obligations set forth herein;
2. Any representation, warranty or statement made by Grant Recipient herein or in any documents or reports relied upon by Agency to monitor implementation of the Project, the expenditure of Grant Funds or the performance by Grant Recipient is untrue in any material respect when made;
3. Grant Recipient (i) applies for or consents to the appointment of, or taking of possession by, a receiver, custodian, trustee, or liquidator of itself or all of its property, (ii) admits in writing its inability, or is generally unable, to pay its debts as they become due, (iii) makes a general assignment for the benefit of its creditors, (iv) is adjudicated as bankrupt or insolvent, (v) commences a voluntary case under the Federal Bankruptcy Code (as now or hereafter in effect), (vi) files a petition seeking to take advantage of any other law relating to bankruptcy, insolvency, reorganization, winding-up, or composition or adjustment of debts, (vii) fails to controvert in a timely and appropriate manner, or acquiesces in writing to, any petition filed against it in an involuntary case under the Bankruptcy Code, or (viii) takes any action for the purpose of effecting any of the foregoing; or
4. A proceeding or case is commenced, without the application or consent of Grant Recipient, in any court of competent jurisdiction, seeking (i) the liquidation, dissolution or winding-up, or the composition or readjustment of debts, of Grant Recipient, (ii) the appointment of a trustee, receiver, custodian, liquidator, or the like of Grant Recipient or of all or any substantial part of its assets, or (iii) similar relief in respect to Grant Recipient under any law relating to bankruptcy, insolvency, reorganization, winding-up, or composition or adjustment of debts, and such proceeding or case continues undismissed, or an order, judgment, or decree approving or ordering any of the foregoing is entered and continues unstayed and in effect for a period of sixty consecutive days, or an order for relief against Grant Recipient is entered in an involuntary case under the Federal Bankruptcy Code (as now or hereafter in effect).

b. Remedies upon Default. If Grant Recipient's default is not cured within 30 calendar days of written notice thereof to Grant Recipient from Agency or such longer period as Agency may authorize in its sole discretion, Agency may pursue any remedies available under this Agreement, at law or in equity. Such remedies include, but are not limited to, termination of this Agreement, return of all or a portion of the Grant Funds, payment of interest earned on the Grant Funds, and declaration of ineligibility for the receipt of future grant awards from Agency. If, as a result of Grant Recipient's default, Agency demands return of all or a portion of the Grant Funds or payment of interest earned on the Grant Funds, Grant Recipient shall pay the amount upon Agency's demand in accordance with Section 8.b.

9. Termination.

a. Termination for Convenience. Either party may terminate this Agreement at any time prior to the expiration date of this Agreement upon 15 days of written notice to the other party. Upon

termination under this Section 9.b. by Grant Recipient, Grant Recipient shall repay Agency all amounts disbursed by Agency to Grant Recipient under this Agreement.

b. Agency Termination. Agency may terminate this Agreement:

- i. Immediately upon written notice to Grant Recipient, if Agency does not obtain sufficient funding and expenditure authorizations to allow Agency to meet its payment obligations under this Agreement.
- ii. Immediately upon written notice to Grant Recipient if state or federal laws, regulations, or guidelines are modified, changed or interpreted in such a way that Agency does not have the authority to provide Grant Funds for the Project or no longer has the authority to provide the Grant Funds from the funding source it had planned to use.
- iii. Upon 30 calendar days of written notice to Grant Recipient, if Grant Recipient is in default under this Agreement and such default remains uncured at the end of said 30 day period or such longer period, if any, as Agency may specify in the notice.

10. General Provisions.

a. **Indemnification.** Grant Recipient shall indemnify, defend (subject to ORS chapter 30 for Oregon public entities) or ORS chapter 180 for private or non-profit entities), and hold harmless the State of Oregon and Agency and their officers, employees, and agents from all claims, suits, actions, losses, damages, liabilities, costs and expenses of any nature, resulting from, arising out of or relating to the activities of the Grant Recipient or Grant Recipient's officers, employees, sub-contractors, or agents under this Agreement.

b. **Amendments.** This Agreement may be amended only by a written instrument signed by both parties. Any such amendment is effective only when fully executed and approved as required by applicable law.

c. **Participation in Similar Activities.** This Agreement in no way restricts Grant Recipient or Agency from participating in similar activities with other public or private agencies, organizations, or individuals.

d. **No Third-Party Beneficiaries.** The State of Oregon and Grant Recipient are the only parties to this Agreement and are the only parties entitled to enforce its terms. Nothing in this Agreement gives, is intended to give, or shall be construed to give or provide any benefit or right, whether directly or indirectly, to a third person unless such a third person is individually identified by name herein and expressly described as an intended beneficiary of the terms of this Agreement.

e. **Notices.** Except as otherwise expressly provided in this Agreement, any communications between the parties hereto or notices to be given hereunder shall be given in writing by personal delivery, facsimile, email, or mailing the same, postage prepaid to Grant Recipient or Agency Agreement Administrators at the address or number set forth on page 1 of this Agreement. Any communication or notice so addressed and mailed shall be effective five (5) days after mailing. Any communication or notice delivered by facsimile shall be effective on the day the transmitting machine generates a receipt of the successful transmission, if transmission was during normal business hours of the recipient, or on the next business day, if transmission was outside normal business hours of the recipient. Any communication or notice given by email shall be effective upon

the sender's receipt of confirmation generated by the recipient's email system that the notice has been received by the recipient's email system. Any communication or notice given by personal delivery shall be effective when actually delivered.

Either party may designate a different person or change the contact information given herein by providing notice in the manner provided in this section and such change shall be effective without need for amendment under Section 10.b.

f. **Governing Law, Consent to Jurisdiction.** This Agreement shall be governed by and construed in accordance with the laws of the State of Oregon without regard to principles of conflicts of law. Any claim, action, suit or proceeding (collectively, "Claim") between Agency (and/or any other agency or department of the State of Oregon) and Grant Recipient that arises from or relates to this Agreement shall be brought and conducted solely and exclusively within the Circuit Court of Marion County in the State of Oregon. In no event shall this section be construed as a waiver by the State of Oregon of any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the eleventh amendment to the Constitution of the United States or otherwise, from any Claim or from the jurisdiction of any court. Grant Recipient hereby consents to the exclusive jurisdiction of such court, waives any objection to venue, and waives any claim that such forum is an inconvenient forum.

g. **Compliance with Law.** Grant Recipient shall comply with all federal, state and local laws, regulations, executive orders and ordinances applicable to the Agreement or to the implementation of the Project. All employers, including Grant Recipient, that employ subject workers who provide services in the State of Oregon shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless such employers are exempt under ORS 656.126.

h. **Public Records.** All information and records submitted to Agency are subject to disclosure under the Public Records Law, ORS 192.410 to 192.505.

i. **Oregon False Claims Act.**

- i. Grant Recipient acknowledges that the Oregon False Claims Act, ORS 180.750 to 180.785, applies to any action or conduct by the Grant Recipient pertaining to this Agreement that constitutes a "claim" (as defined by the Oregon False Claims Act, ORS 180.750 (1)). By its execution of this Agreement, the Grant Recipient certifies the truthfulness, completeness, and accuracy of any statement or claim it has made, it makes, it may make, or causes to be made that pertains to this Agreement or the Project for which the grant activities work is being performed. In addition to other penalties that may be applicable, Grant Recipient further acknowledges that if it makes, or causes to be made, a false claim or performs a prohibited act under the Oregon False Claims Act, the Oregon Attorney General may enforce the liabilities and penalties provided by the Oregon False Claims Act against Grant Recipient. Nothing in this section or this Agreement may be construed as limiting or derogating from any authority granted the Oregon Attorney General under 180.750 to 180.785.
- ii. Grant Recipient shall immediately report in writing, to the Agency, any credible evidence that a principal, employee, agent, or subcontractor of the Grant Recipient, or any sub-recipient or other person, has made a false claim or committed a prohibited act under the Oregon False Claims Act, or has committed a criminal or civil violation of laws pertaining to fraud, bribery,

gratuity, conflict of interest, or similar misconduct in connection with this Agreement or funds paid by the Agency under this Agreement.

iii. Grant Recipient must include subsections (a) through (b) of this section in each subcontract or sub grant the Grant Recipient may award in connection with the performance of this Agreement. In doing so, the Grant Recipient may not modify the terms of those subsections, except to identify the subcontractors or sub Grant Recipient that will be subject to those provisions.

j. **Sensitive Information.** Except for information that is already a matter of public record, Grant Recipient shall not publish or otherwise disclose, except to Agency or as otherwise required by law, any information or data obtained hereunder from private individuals, organizations, or public agencies in a publication wherein the information or data furnished by or about any particular person or establishment can be identified, except with the written consent of such person or establishment. Unless otherwise required by law, information concerning the business of Agency, its financial affairs, and its relations with its clients and employees, as well as any other information that may be specifically classified as confidential by Agency, shall be kept confidential. Grant Recipient shall instruct its employees and subcontractors to keep such information confidential by using the same care and discretion that they use with similar information that the Grant Recipient designates as confidential.

k. **Severability.** If any term or provision of this Agreement is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if this Agreement did not contain the particular term or provision held to be invalid.

l. **Assignment of Agreement, Successors in Interest.** Grant Recipient shall not assign or transfer any interest in this Agreement without the prior written approval of Agency. Any such assignment or transfer, if approved, is subject to such conditions and provisions, as Agency may deem necessary, including without limitation that Agency shall have reasonable access to the facilities of the assignee or transferee to the same extent as to the facilities of Agency as described in Section 6 hereof. No approval by Agency of any assignment or transfer shall be deemed to create any obligation of Agency in addition to those set forth in this Agreement nor will Agency's approval of an assignment or transfer relieve Grant Recipient of any of its duties or obligations under this Agreement.

m. **Headings.** The headings and captions to sections of this Agreement have been inserted for identification and reference purposes only and shall not be used to construe the meaning or to interpret this Agreement.

n. **Construction.** The parties agree and acknowledge that the rule of construction that ambiguities in a written agreement are to be construed against the party preparing or drafting the agreement shall not be applicable to the interpretation of this Agreement.

o. **Independent Contractors.** The parties agree and acknowledge that their relationship is that of independent contracting parties and that Grant Recipient is not an officer, employee, or agent of the State of Oregon as those terms are used in ORS 30.265 or otherwise.

p. **Force Majeure.** Neither Agency nor Grant Recipient shall be held responsible for delay or default caused by fire, civil unrest, natural causes or war which is beyond, respectively, the Agency's or Grant Recipient's reasonable control. Each party shall, however, make all reasonable efforts to remove or eliminate such cause of delay or default and shall, upon the cessation of the cause, diligently pursue performance of its obligations under this Agreement.

q. **Integration and Waiver.** This Agreement, including all Exhibits, constitutes the entire agreement between the parties on the subject matter hereof. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this Agreement. The delay or failure of either party to enforce any provision of this Agreement shall not constitute a waiver by that party of that or any other provision. Grant Recipient, by the signature below of its authorized representative, hereby acknowledges that it has read this Agreement, understands it, and agrees to be bound by its terms and conditions.

r. **Survival.** All provisions of this Agreement set forth in the following sections shall survive termination of this Agreement: Sections 5 and 8, and any other provisions that by their terms are intended to survive termination of this Agreement.

THE PARTIES, by execution of this Agreement, hereby acknowledge that their signing representatives have read this Agreement, understand it, and agree to be bound by its terms and conditions.

OREGON INSTITUTE OF TECHNOLOGY

OREGON EMPLOYMENT DEPARTMENT

By: *Sara Reuter*

By: _____

SARA REUTER
Printed Name

Shalee Hodgson

DIRECTOR OF SPONSORED PROJECTS
Title

Deputy Administrator, Workforce Investments

8/25/2016
Date

Date

Approved for Legal Sufficiency in accordance with ORS 291.047

Marvin Fjordbeck
Senior Assistant Attorney General

8/11/16
Date

GRANT AGREEMENT #16-0429-02 EXHIBIT A

OREGON TALENT COUNCIL ROUND 2 GRANT APPLICATION #16-0429

1. Cover Page and Responses

Proposals must address each of the items listed in this section and all other requirements set forth in this RFA. Proposals shall include the following items in the order listed below. Page limits are noted, when relevant.

Proposer Organization Name:	Oregon Institute of Technology
Primary Contact Person/Title:	Maria Lynn Kessler, Professor
Address:	27500 SW Parkway Ave.
City/State/Zip:	Wilsonville, OR 97070
Phone:	(503) 821-1308
Email:	marialynn.kessler@oit.edu

Proposal Title:	Supervised Practicum in ABA: Building Oregon's autism behavioral health workforce through university – industry partnerships
Proposal Abstract: <i>(roughly 3 to 10 sentences describing the project)</i>	This proposal seeks to build the statewide supervision/practicum site structures that are necessary to meet the critical workforce training needs in behavioral health. Oregon faces a critical shortage of licensed Behavior Analysts to meet the demand for qualified providers of medically necessary ABA therapy for children with autism. This project will increase statewide access to the education and practicum experiences necessary for incumbent and emerging workers to meet licensure standards. To achieve the goals of increased access and employability, OregonTech will expand its current course work to include a supervised practicum. A practicum coordinator will work closely with industry partners to develop a network of practicum sites with qualified on-site supervisors. Coursework will be offered via synchronous video technology.
Industry Sector(s) Addressed:	Healthcare
Collaborating Institutions (if any):	
Industry Partners:	Centria Healthcare Cascade Behavioral Intervention, LLC A Hope For Autism
Occupational Cluster(s) Addressed: <i>(see page 2)</i>	<i>Mission critical occupations: Mental and Behavioral Counselors</i>

Amount Requested from OTC:	\$182,177
% of Budget represented by OTC grant:	33%
% of Budget represented by sponsoring institution:	17%
% of Budget represented by industry/other partners:	50%

GRANT AGREEMENT #16-0429-02 EXHIBIT A

Q#1 Project Description. (Page Limit: 2)

The Oregon Talent Plan identifies mental and behavioral health counselors as “mission critical occupations”, with frontline behavioral health providers in high demand, especially in rural areas. This proposal specifically addresses the critical need for qualified Applied Behavior Analysis (ABA) therapy providers to serve the growing population of children with autism. In 2013, Oregon passed legislation (SB 365) that created the Behavior Analysis Regulatory Board (BARB). The BARB has established standards for licensure for Behavior Analysts and Assistant Behavior Analysts to provide ABA services. Key elements of the standards include approved course work and supervised experience. Oregon Institute of Technology offers the approved course work and seeks to expand our ability to meet the workforce training demands resulting from the passage of SB 365 by developing an accelerated supervised practicum.

Prior to the passage of legislation in 2013, the primary barrier to accessing ABA services was insurance reimbursement due to the lack of a recognized and reimbursable licensed provider. Since the creation of the BARB and the licensure of behavior analysts and assistant behavior analysts, the primary barrier for accessing ABA services is the lack of qualified providers. Although the number of licensed providers in Oregon has grown to approximately 80, industry analysis indicates an immediate need for an additional 1,300 licensed providers.

The standards for licensure in Oregon include national certification as a behavior analyst. The requirements for national certification include having an approved master’s degree (in Education, Psychology, or Applied Behavior Analysis), 270 hours of approved course work, and approved supervised experience. Oregon Tech offers a Graduate Certificate in ABA that meets the approved course work requirement and has partnered with Southern Oregon University to offer a joint MEd in ABA and ASD. **The remaining obstacle for potential behavior analysts, both incumbent and emerging, is access to supervised experience.** The development of an accelerated supervised practicum and agency agreements for practicum sites is a critical need.

In order to meet the critical training needs for incumbent and emerging behavioral health workers throughout the state, we seek the support of OTC. Specifically, we seek resources to support a full-time Supervised Practicum Coordinator to establish an accelerated supervised practicum. The key deliverables of this position will be a) practicum curriculum, processes, and procedures, b) statewide network of practicum sites, and c) placement of students in statewide practicum sites.

Oregon Tech will partner with autism service agencies that will provide practicum sites and on-site supervision. The project will enhance the employability of students and incumbent workers who seek to advance from the entry-level interventionist position to the behavior analyst position by providing the required industry-based supervised experience in the accelerated university practicum.

Oregon Tech has a well established history of responding rapidly to industry demands for quality programs in ABA. In response to a request from Dr. Jerry Shook, then President of the Behavior Analysts Certification Board, Inc. (BACB®), we developed an undergraduate course sequence in ABA which was approved by the BACB in March 2011. In response to repeated requests from industry professionals and potential students, Oregon Tech began offering graduate level ABA courses in 2012. This course sequence, offered at both Klamath Falls and Wilsonville, was approved by the BACB® in 2014. Following passage of SB 365, our industry partners identified the lack of in-person master’s programs with approved ABA course work as a barrier to ABA workforce development. In response to this need, Oregon Tech partnered with Southern Oregon University to offer a joint Master’s in Education degree with emphasis in

GRANT AGREEMENT #16-0429-02 EXHIBIT A

ABA and Autism Spectrum Disorder (ASD). This unique partnership has allowed Oregon Tech to respond rapidly to industry demand. The courses are offered via synchronous video-conferencing, allowing statewide access. However, access to appropriate supervision experiences remains an obstacle for our students. This proposal seek support to address the last remaining barrier to workforce development in ABA in Oregon.

In sum, as a result of legislative action to meet the needs of our autistic community, we face a pressing workforce need in Applied Behavior Analysis. This proposal seeks to build the statewide supervision/practicum site structures that are necessary for training this workforce. Such a training structure does not exist in our state; it must be built if this workforce need is to be met.

Q#2 Key Persons. (Page Limit: 2)

*Given that projects need to be closely connected with industry, provide the summary information requested below for up to 4 Key Persons for the Proposal. Biographical summaries of no more than two pages per Key Person may be included as attachments, but **may not replace the information requested in the table below.***

Key Person #1 Name Maria Lynn Kessler	Title Professor	Organization Oregon Institute of Technology
Briefly explain the role of this individual and describe their experience and skills for carrying out the Proposal. Dr. Kessler has a PhD in Psychology with an emphasis in Applied Behavior Analysis. Dr. Kessler developed the BACB® approved undergraduate and graduate course sequences at Oregon Tech and serves as the ABA program director. Dr. Kessler is actively involved with community and industry partners. She has served the two terms as Vice President (2012-2016) of the Oregon Association for Applied Behavior Analysis (ORABA). Dr. Kessler also serves on the Oregon Healthcare Workforce Committee and the Behavioral Health Integration Subcommittee. Dr. Kessler also serves as co-director of Oregon Tech's Relationship Building Program, a DHS funded contract to provide family mentoring services to families seeking reunification with their children who were removed for maltreatment. Dr. Kessler will bring her experience directing programs and building industry relationships to the project. Dr. Kessler's primary role will be to supervise the development and implementation of the supervised practicum.		
Key Person #2 John Borgen	Title Assistant Professor	Organization Oregon Institute of Technology
Briefly explain the role of this individual and describe their experience and skills for carrying out the Proposal. Dr. Borgen has a PsyD in clinical psychology and is a Board Certified Behavior Analyst-Doctoral (BCBA-D). Dr. Borgen will be joining our faculty in fall 2016. He brings with him strong experience providing ABA supervision. He will contribute this expertise to the implementation of the supervised practicum. Dr. Borgen will assume greater responsibility for oversight of the supervised practicum following the grant funded period.		
Key Person #3 Samantha Patterson	Title University Relations Specialist	Organization Centria Healthcare
Briefly explain the role of this individual and describe their experience and skills for carrying out the Proposal. Samantha Patterson has experience working with universities to develop supervision experiences		

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<p>at Centria Healthcare sites (http://www.centriaautism.com/). Her role in the project is to facilitate the processes and procedures for establishing and implementing supervision sites for OregonTech students.</p>		
<p>Key Person #4 Marla Edge</p>	<p>Title- Director of Academic Agreements</p>	<p>Organization Oregon Institute of Technology</p>
<p>Briefly explain the role of this individual and describe their experience and skills for carrying out the Proposal. Marla Edge is the Director of Academic Agreements and will provide guidance and support in the development of all agreements with our partners in this project.</p>		

Q#3 Project Implementation Plan. (Page Limit: 10 pages allowed for all parts of Q#3, including a,b,c)

Grant Purpose and Scope of Activities: The Accelerated Supervised Practicum in Applied Behavior Analysis (ABA) project will meet the mission critical workforce training needs for incumbent and emerging behavioral health workers throughout Oregon. Specifically, the project will expand Oregon Tech's ABA program (<http://www.oit.edu/wilsonville/academics/degrees/applied-behavior-analysis>) by developing and implementing a university-based accelerated supervised practicum.

This project achieves the goal of providing a program that is easily and rapidly adaptable to statewide delivery through the use of synchronous video-conferencing for course delivery and on-site practicum supervision.

This project achieves the goal of greater connectivity between the education and the skills and experience required for employment by developing a supervised practicum that meets the experience standards for behavior analysts and placing students in practicum sites with industry partners.

Closing the mission critical talent gap for ABA providers will be achieved by a) working closely with industry partners to provide supervised practicum that ensures that students have the required skills and experience for employability and b) preparing students to successfully meet all requirements for national certification and state licensure.

Key Outcomes and Activities: The primary outcome to be achieved by this project is to ensure that graduates/completers of Oregon Tech's ABA programs have the applied and industry-based skills critical to employability. This outcome will be achieved by providing the required course-work and industry-based practicum experiences. Statewide access to course-work and practicum will be increased by expanding Oregon Tech's current program to include the supervised practicum and utilizing existing technology to connect with students across the state.

The notable return on investment of this project will be the increased number of students able to access the required supervision needed for certification and state licensure in order to enter and/or qualify for promotion within the ABA workforce. With OTC's one-year investment to develop the supervised practicum we expect to triple the size of the current ABA workforce in Oregon within ten years, with significant impact on the rural areas of the state. The key milestones for the project are:

- Supervised Practicum Coordinator Position filled
Oregon Tech will begin search for Practicum Coordinator, June 2016
Practicum coordinator will be hired by Oregon Tech, July 2016
- Practicum Curriculum developed summer 2016
The practicum coordinator will work with industry partners and ABA program director to develop the

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curriculum for supervised practicum; curriculum will address the skills to be developed during the practicum, identify the tasks and experiences to be completed by the students, and establish standards for assessing student progress

- Processes and Procedures for practicum established summer and fall 2016
The practicum coordinator will work with industry partners, the ABA program director, and the director of academic agreements to develop the processes and procedures for practicum, including all institutional and industry agreements. Agreements for practicum sites will be in place for initial practicum placements by fall 2016
- Initial practicum sites established fall 2016
Practicum coordinator will work with Centria Healthcare, Cascade Behavioral Intervention, and A Hope for Autism to establish initial practicum sites and identify appropriate on-site supervisors; one on-site supervisor will be identified and at least two practicum sites will be identified
- Statewide network of industry partners and supervised practicum sites established fall 2016, winter, spring 2017
Practicum coordinator will work with ABA faculty, ABA program director, and director of academic agreements to contact and initiate partnership agreements with potential industry partners; multiple sites across multiple geographic regions will be identified fall 2016
Practicum coordinator will work with ABA faculty, ABA program director, and director of academic agreements to establish partnership agreements with potential industry; agreements will be established with agencies in multiple sites across multiple geographic regions partners fall 2016, winter and spring 2017
- Students enrolled in supervised practicum
4-6 students will enroll in practicum fall 2016
15-20 students will enroll in practicum winter 2017, spring 2017
- Assessment and evaluation, summer, fall 2016, winter, spring 2017
Practicum coordinator will work with ABA faculty and program director to develop the specific measures and methods to assess satisfaction and program impact, summer and fall 2016
Practicum coordinator will work with ABA faculty and program director to implement assessment and evaluation, winter and spring 2016.

Enhanced Employability: Autism providers in Oregon have a critical need for Licensed Behavior Analysts. The addition of the accelerated supervised practicum to the ABA program at Oregon Tech will allow students to meet both the course work and the supervised experience requirements necessary to be eligible to take the national certification exam in Behavior Analysis. Passing the national exam allows students to be licensed in Oregon. Thus, this project will ensure that students will be eligible for licensure and employment.

Incumbent workers who may have the necessary course work but lack the supervised experience may also enroll in the accelerated supervised practicum. This will be especially helpful for individuals who have had difficulty connecting with an appropriate supervisor and may allow them to meet certification and licensure eligibility standards more quickly. Completing certification and licensure provides workers with the credentials needed for promotion.

Flexible, scalable, and cost-effective delivery: The accelerated supervised practicum course will be offered to students using synchronous video-conferencing technology. Oregon Tech currently uses this technology to offer ABA courses to students in multiple locations statewide. Synchronous video-conferencing is a cost-effective

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method that allows us to utilize local experts and resources to provide statewide access to the required course work and supervised practicum critical to developing the ABA behavioral health workforce. The combination of this course delivery method and on-site supervision at the local level increases the capacity of the program to reach students throughout the state.

The project will pilot the use of BDS learning modules. The BDS learning modules will serve as an additional resource to students while enrolled in the ABA courses and provide practice test items that will prepare students for the national certification exam. It is expected that including the BDS modules will make it more likely that students are fully prepared to pass the exam as soon as they complete their coursework and experience.

Sustainability: OTC funds will allow Oregon Tech to develop and establish the processes and structures necessary to offer the accelerated supervised practicum for potential ABA providers. OTC funds will support the practicum coordinator, whose primary focus will be to develop the curriculum and establish the practicum sites. Following the grant period, faculty in the ABA program at Oregon Tech will assume full responsibility for maintaining industry partnerships and offering the accelerated supervised practicum course.

If the BDS learning modules are shown to be effective in helping students pass the national exam, we will assign purchase of the modules along with other required course materials (i.e., textbooks).

Q#3a Industry Engagement.

Oregon Tech will engage with our behavioral health industry partners to provide an accelerated university supervised practicum for students and incumbent workers seeking to meet eligibility requirements for national certification and Oregon licensure in applied behavior analysis.

Centria Healthcare is a provider of ABA for children with autism and is expanding services in Oregon. Centria is committed to offering services in high need areas including Klamath County and to providing paid practicum positions for students in the program. Centria's co-investment includes the in-kind contribution of the on-site supervision by their Licensed Behavior Analysts, paid practicum positions, and employment opportunities for completers of the program who achieve licensure.

Cascade Behavioral Intervention provides ABA treatment for children in central and southern Oregon. Specializing in early intensive ABA for young children diagnosed with autism, Cascade Behavioral Intervention works to create positive outcomes for children through evidence-based intervention. Cascade Behavioral Intervention's co-investment includes the in-kind contribution of the on-site supervision by their Licensed Behavior Analysts, paid practicum positions, and employment opportunities for completers of the program who achieve licensure.

A Hope For Autism (AHFA) is a non-profit organization providing behavioral therapy and specialized education for children with autism and pervasive developmental disorders in Portland, OR. AHFA's co-investment includes the in-kind contribution of the on-site supervision by their Licensed Behavior Analysts, paid practicum positions, and employment opportunities for completers of the program who achieve licensure.

The Supervised Practicum Coordinator will work closely with Centria, Cascade Behavioral Intervention, and AHFA to establish the processes and agreements necessary for successful implementation of the practicum. The coordinator will also network with potential industry partners statewide to establish practicum sites across the state. A key component will be the development of the procedures for connecting students to practicum and employment opportunities.

We will meet regularly with current and developing industry partners. We will seek input on curriculum development to ensure that we are providing the appropriate education and skills. We will seek feedback from our industry partners on the preparation and employability of our students.

We expect to develop an adjunct faculty pool from our industry partners, in addition to providing on-site supervision to individual practicum students, we will encourage our partner behavior analysts to bring their experience into the classroom.

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Q#3b Reach and Diversity.

Oregon Tech has a history of collaboration with other institutions and offering statewide access to our ABA programs. In 2015, Oregon Tech and Southern Oregon University joined together to offer a Master's in Education degree with emphasis in Autism Spectrum Disorder (ASD) and ABA. The program combines Oregon Tech's Graduate Certificate in ABA with SOU's ASD courses and is available to students everywhere via synchronous videoconferencing. The practicum coordinator will work closely with Oregon Tech's office of Academic Agreements to continue developing partnerships with institutions across the state in order to facilitate access to the program for all Oregonians.

We recognize that many Oregonians in rural areas are place-bound. We also recognize that access to services in rural areas is challenging, in part due to the lack of qualified providers. Oregon Tech will work with autism agencies seeking to expand services to these rural areas. Specifically, we will work to provide coursework and accelerated supervised practicum to the local workforce. The model of providing synchronous videoconferencing for course work and group supervision combined with on-site individual supervision provided by our industry partners will allow the program to reach multiple areas of the State, especially rural areas.

The development of the accelerated university supervised practicum will provide access to supervision for incumbent workers who have met the course work requirements but had been unable to complete the supervised experience requirements.

Q#3c Metrics and Evaluation Process.

- a. **Program Completers:** How many students or workers are expected to access and complete the project, and what will be the sustained capacity after the grant investment? (Note: if the proposed project is an expansion, then the number served is the incremental capacity, not the total capacity)

The program will impact current and future ABA students by providing the opportunity for accelerated supervised experience. It is expected that during the 2016/17 academic year, 15-20 students will enroll in the supervised practicum. The majority of the students will complete the required number of practicum hours within 12 months of beginning supervision. The initial investment in the Supervised Practicum Coordinator will allow the processes and procedures to be fully developed and established. At the end of the grant, faculty in the ABA programs will assume responsibility for maintaining the supervision sites and providing the university practicum to 20 students per year.

- b. **Investment Leverage:** What are the amount and type of co-investments from the sponsoring organization, industry and other collaborators?

Sponsoring Organization: Oregon Tech will invest \$94,967 to provide faculty release time; synchronous course delivery equipment in order to offer courses statewide, and will waive indirect cost recovery.

Industry Collaborators: Centria Healthcare, A hope for Autism, and Cascades Behavioral will contribute \$270,500 to provide paid practicum positions for students, on-site supervision from licensed behavior analysts and to participate in curriculum development.. All industry collaborators will hire program completers.

- c. **Customer Satisfaction:** How will industry and students or workers rate the value and usefulness of the project?

The Supervision Program Coordinator will develop and administer satisfaction surveys to students, site supervisors, and key industry stakeholders. The coordinator will hold regular meetings with industry partners and will seek feedback regularly.

Student surveys will assess satisfaction with:

- The quality of the educational experience, including
 - o delivery methods, value of BDS modules, preparation for employment, preparation for certification/licensure; and

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- The quality of the supervised practicum experience, including
 - o the sites, group and individual supervision, supervision activities and tasks, preparation for employment, and preparation for certification/licensure.

Industry partner surveys will assess satisfaction with:

- The quality of practicum students,
 - The relationship with program faculty,
 - The relationship with Oregon Tech,
 - The quality of students hired, and
 - The number of qualified applicants for employment.
- d. **Program Impact and Effectiveness:** How will the impact of the program on graduates and completers be measured? (Examples may include job placement, wage increase, the increase in the percent of graduates and completers with industry work experience and other demonstrable metrics.) What is the return on investment for these funds and how will it be measured?

Note: Students entering the program in fall 2016 and attending full-time will complete required coursework and experience no earlier than August 2017. Data on completion rates, licensure rates, and employment rates will be collected after the grant period has ended.

The practicum coordinator will work with the ABA program director and faculty to evaluate the impact and effectiveness of the project throughout the grant period and beyond. Student and industry satisfaction will be assessed as described above. The project is expected to increase accessibility to required supervision experience for students and incumbent workers. The impact of the program on access to supervision will be measured by tracking:

- The number of program students enrolled in practicum per term;
- The number of non-program students enrolled in practicum per term;
- The number of practicum sites available to students per term;
- The number of students placed at each practicum site per term;
- The geographic locations of practicum sites;
- The geographic location of students enrolled in the program;
- Number of required supervision hours completed per student by June 30, 2017.

**GRANT AGREEMENT #16-0429-02 EXHIBIT A
ATTACHMENT A – STATEMENT OF ASSURANCES**

Proposer (organization): Oregon Institute of Technology		
Primary Contact Person/Title: Maria Lynn Kessler		
Address: 27500 SW Parkway Ave		
City: Wilsonville	State: OR	Zip: 97070
Phone: (503) 821-1308	Email: marialynn.kessler@oit.edu	

By signing this page and submitting a Proposal, the undersigned (a) certifies that he/she is a duly authorized representative of the Proposer, has been authorized by the Proposer to make all representations, attestations, and certifications contained in this Proposal, and to submit this Proposal on behalf of the Proposer, and (b) further certifies on behalf of the Proposer that the following statements and the contents of the submitted Proposal are true, complete and accurate:

1. No attempt has been made or will be made by the Proposer to induce any other person or organization to submit or not submit a Proposal.
2. Proposer does not discriminate in its employment practices with regard to race, creed, age, religious affiliation, sex, disability, sexual orientation or national origin, unless otherwise exempted.
3. The statements contained in this Proposal are true and complete to the best of the Proposer's knowledge and Proposer accepts as a condition of the Grant Agreement, the obligation to comply with the applicable state requirements, policies, standards, and regulations. The undersigned recognizes that this is a public document and open to public inspection.
4. The Proposer, by submitting a Proposal in response to this RFA, certifies that it understands that any statement or representation contained in, or attached to, its Proposal, and any statement, representation, or application the Proposer may submit under any Grant Agreement OED may award under this RFA, constitutes a "claim" (as defined by the Oregon False Claims Act, ORS 180.750(1)), is subject to the Oregon False Claims Act, ORS 180.750 to 180.785, and to any liabilities or penalties associated with the making of a false claim under that Act.
5. If the Proposer is awarded a Grant as a result of this RFA, the Proposer will be required to complete, and will be bound by a Grant Agreement, substantially in the form made available by the OTC. At the time of signing the Grant Agreement with OED, the Proposer will be required to provide its Federal Employer Identification Number (FEIN).
6. The Proposer, if awarded a Grant Agreement, agrees to carry out and facilitate the partnerships and use of funding as described in Proposal and will adhere to the sustainability plan and co-investment committed.
7. The Proposer, if awarded a Grant Agreement, will submit an interim progress report and final grant report as outlined in the RFA and Grant Agreement.


 Signature: _____ Date: May 31, 2016
 (Authorized to Bind Proposer)

Printed Name: Sara Reuter Title: Director of Sponsored Projects

**GRANT AGREEMENT #16-0429-02 EXHIBIT A
ATTACHMENT B – BUDGET PROPOSAL**

Personnel Expenses of Key Contributors

Employee/Contractor Name	Employee/Contractor Title	% FTE allocated to the Project	Salary & Benefits or Fee ¹
Maria Lynn Kessler	Professor	0.363	\$66,013
tbd	Supervised Practicum Coordinator	1.000	\$93,600
John Borgen	Assistant Professor	0.250	\$25,967
Marla Edge	Director Academic Agreements	0.050	\$6,024
Centria	Practicum Clinical Sprvsr/BCBA (4)	0.600	\$72,000
Centria	Curriculum Developer/Board Certified Behavioral Analyst	0.150	\$18,000
A Hope for Autism	Practicum Clinical Sprvsr/BCBA (2)	0.300	\$36,000
Cascades Behavioral	Practicum Clinical Supervsr/BCBA	0.050	\$6,500
			\$
Total Personnel Expenses			\$324,104

Non-personnel expenses directly associated with project:

	Description	Amount
Facilities & Equipment (Excluding IT)		\$
IT systems and or equipment	Synchronous Course Delivery Equipment	\$20,300
Purchase of content, software licenses or related expenses	BDS Module Licensing	\$9,000
Supplies & other operating costs	Course prep supplies, practicum site administrative documentation	\$7,500
Marketing & Outreach	Community College site visits, recruitment materials	\$2,500
Contracted Services:		\$
Other: Coordinator Travel	2 trips per month for 9 months @ \$1000/month	\$9,000
Other: Practicum Placements	7 Student Practicum Positions	\$138,000
Indirect Cost Recvoery	10% of total project cost	\$37,240
Total General Expenses		\$223,540

Total Proposed Project Budget: (Personnel + Non-Personnel Expenses) \$547,644

¹ Salary costs to cover only the percent of FTE allocated to the project for the duration of the grant.

GRANT AGREEMENT #16-0429-02 EXHIBIT A

Funding Allocation:

	Estimated \$ Amount of Budget	Estimated % of Budget
From OTC Grant Funds	182,177	33
From Proposing Organization	94,967	17
From Industry	270,500	50

BUDGET NARRATIVE

Description	Function	OTC Request	Oregon Tech	Industry
Maria Lynn Kessler	Compensation & fringe is budgeted at actual contractual rates. Dr. Kessler will develop the accelerated supervised practicum curriculum & coordinate project implementation/evaluation	\$49,427	\$16,586	
TBD	Compensation is estimated at \$65,000 plus fringe of 44%. The Coordinator establishes practicum sites across the state. With Dir. of Academic Agreements develop a network of industry/education stakeholders to assist ongoing recruitment of emerging workers & expansion of practicum sites & geographic locations	\$93,600		
John Borgan	Compensation and fringe is budgeted at current rates. Prof. Borgan will provide practicum curriculum oversight.		\$25,967	
Marla Edge	Compensation and fringe is budgeted at actual contractual rates. With the Practicum Coord. develop a network of industry/education stakeholders to assist with ongoing recruitment of emerging workers		\$6,024	
Centria BCBA (5)	See Support Letter			\$90,000
A Hope for Autism	See Support Letter			\$36,000
Cascades Behavioral	See Support Letter			\$6,500
IT Systems or Equipment		\$11,150	\$9,150	
Software Licenses		\$9,000		
Supplies & Other Operating		\$7,500		
Marketing & Outreach		\$2,500		
Travel		\$9,000		
Student Practicums (7)	See Support Letters			\$138,000
Indirect Cost Recovery	10% total costs less practicums & indirect recovery. Fed. negotiated rate is 50% of compensation.		\$37,240	

GRANT AGREEMENT #16-0429-02 EXHIBIT A



May 27, 2016

M.s. Melissa Leoni
Oregon Talent Council
Oregon Employment Department
7995 SW Mohawk Street
Tualatin, OR 97062

Reference: RGA #16-0429s

Dear Ms. Leoni and members of the Oregon Talent Council,

We are writing to express the commitment of Oregon Institute of Technology for the development of Supervised Practicum in ABA: Building Oregon's autism behavioral workforce through university – industry partnerships, by Oregon Tech.

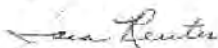
We commit to:

- Providing .29 FTE of faculty and staff release time during the grant period to perform activities necessary for the completion of grant deliverables; \$48,577
- Provide Synchronous Course Delivery equipment; \$9,150
- Waive indirect cost recovery; \$37,240

Oregon Institute of Technology is committed to providing graduates who have applied skills and can add value to their employers on the first day they are hired.

Thank you for your time and consideration of this worthy proposal.

Sincerely,


Sara Reuter
Director of Sponsored Projects

3201 Campus Drive – Klamath Falls, OR 97601 – (541) 885-1734

Hands-on education for real-world achievement.

GRANT AGREEMENT #16-0429-02 EXHIBIT A



*Uomo. Roachy.
Alma. Cariny.*

May 27, 2016

Ms. Melissa Leoni
Oregon Talent Council
Oregon Employment Department
7995 SW Mohawk Street
Tualatin, OR 970621

Reference: RGA #16-0429s

Dear Ms. Leoni and members of the Oregon Talent Council,

We are writing to express the commitment of Centria Healthcare for the development of qualified Applied Behavior Analysis (ABA) providers by Oregon Tech. As an industry partner we are exuberant about Oregon Tech's plans to expand the current ABA curriculum by developing the supervised practicum component. The addition of the supervised practicum will allow students to meet both the course work and the supervised experience requirements necessary to qualify for national certification and licensure in Oregon as behavior analysts.

We know that Oregon and the nation are experiencing shortages of key mental and behavioral health care providers, including qualified ABA providers. According to recent industry market analysis, there is an immediate need for over 1,300 behavior analysts in Oregon. Given the current levels of autism diagnosis, the demand for behavior analysts is expected to remain high.

Centria Healthcare is committed to recruiting a diverse healthcare workforce with the skills and knowledge to serve our patients with the highest quality of care. We operate across the United States with the purpose to enrich the lives of individuals needing healthcare through providing unparalleled service in the comfort of their own home. Centria provides ABA therapy to children that have been diagnosed with an Autism Spectrum Disorder. We work with children on the spectrum at all ages and all across the spectrum. We strive to become the premier ABA provider through institutionalizing the values of great care, service and leadership.

We commit to:

- Providing at least 2 practicum placements each year, in addition to the cost of the BCBA providing supervision Centria also will provide the supportive and administrative

Office 248-299-0030
Fax 248-438-1566

www.centriahealthcare.com

Serving the Entire
State of Michigan

GRANT AGREEMENT #16-0429-02 EXHIBIT A



Always Ready.
Always Caring.

- services such as CSM, HR, Payroll etc. at an estimated cost of approximately \$7,000 per year per person. This includes the cost of paying the student for their direct hours during their practicum, loss of efficiency due to not being on cases and administration to ensure compliance with the BACB experience standards.
- Offering our current professional staff as supervisors in the clinical setting, as well as potentially contributing as adjunct faculty members at an estimated value of \$18,000 per person per year. This includes the cost of the BCBA supervising and supporting the student during their practicum class and loss of efficiency due to not being on cases.
- Advising on the needs of industry in relation to the development of curriculum;
- Employing Oregon Tech ABA graduates who successfully complete the program.

Oregon Institute of Technology is leading the way in Oregon in the development of applied behavior analysis graduates who have applied skills and can add value to their employers on the first day they are hired. We look forward to having access to this new and emerging talent pool.

Thank you for your time and consideration of this worthy proposal.

Sincerely,

A handwritten signature in black ink, appearing to read 'Johnathan Cotcher'.

Johnathan Cotcher
Chief Talent Officer
Centria Healthcare

Office 248-299-0030
Fax 248-438-1566

www.centriahealthcare.com

Serving the Entire
State of Michigan

GRANT AGREEMENT #16-0429-02 EXHIBIT A



Executive Director
Robbin Sobotka-Soles, BCABA

Vice President
William Soles, MA, LPC, NCC

Secretary
Shenica Payne, ESQ

Treasurer
Krista Robertson
Jeremy Richards

Clinical Director
Shawn Hain, MA, BCBA

Program Director
Rebecca McFasson, MA

2120 SW Jefferson St.
200B
Portland, OR 97201
503.244.4083

May 27, 2016

Ms. Melissa Leoni
Oregon Talent Council
Oregon Employment Department
7815 SW Monawk Street
Tualatin, OR 970621

Reference: RGA #16-0429#

Dear Ms. Leoni and Members of the Oregon Talent Council,

We are writing to express the commitment of A Hope for Autism Foundation to assist in the development of qualified Applied Behavior Analysis (ABA) providers by Oregon Tech. As a provider of ABA services, we are enthusiastic about Oregon Tech's plans to expand their current curriculum by developing a supervised practicum component. We understand that the addition of the supervised practicum will allow students to meet both the course work and the supervised experience requirements necessary to qualify for national certification and licensure in Oregon as behavior analysts.

We know that Oregon and the nation are experiencing shortages of key mental and behavioral health care providers, including qualified ABA providers. According to recent industry market analysis, there is an immediate need for over 1,300 behavior analysts in Oregon. Given the current levels of autism diagnosis, the demand for behavior analysts is expected to remain high.

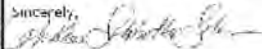
A Hope for Autism Foundation is committed to recruiting a diverse healthcare workforce with the skills and knowledge to serve our patients with the highest quality of care. Our mission is to provide evidence-based treatment and financial assistance to families affected by autism. We offer on-site ABA treatment for children and adults on the autism spectrum, as well as in-home services and parent trainings.

A Hope for Autism is committed to:

- Providing at least 2 and no more than 22 practicum placements each year, at an estimated value of \$18,000.
- Offering our current professional staff as supervisors in the clinical setting, as well as potentially contributing as adjunct faculty members, at an estimated value of 36,000.
- Addressing the needs of industry in relation to the development of curriculum.
- Employing Oregon Tech ABA graduates who successfully complete the program.

Oregon Tech is leading the way in Oregon in the development of applied behavior analysis graduates who have applied skills and can add value to their employers on the first day they are hired. We look forward to having access to this new and emerging talent pool.

Thank you for your time and consideration of Oregon Tech's important proposal.

Sincerely,


Robbin Sobotka-Soles, BCABA
Executive Director

GRANT AGREEMENT #16-0429-02 EXHIBIT A

Cascade Behavioral Intervention

Jonny Fischer, M.S., BCBA jenny.fischer@cascadebehavior.com

P.O. Box 1432, Bend, OR 97709
Cell: (541) 480-2570 • Fax: (541) 659-8509 • Office: (541) 306-3483
www.cascadebehavior.com

May 11, 2016

Ms. Melissa Leoni
Oregon Talent Council
Oregon Employment Department
7995 SW Mohawk Street
Tualatin, OR 97062

Reference: RGA #16-0429

Dear Ms. Leoni and members of the Oregon Talent Council,

We are writing to express the commitment of Cascade Behavioral Intervention, for the development of qualified Applied Behavior Analysts (ABA) providers by Oregon Tech. As an industry partner we are excited about Oregon Tech's plans to expand the current ABA curriculum by developing the supervised practicum component. The addition of this supervised practicum will allow students to meet both the course work and the supervised experience requirements necessary to qualify for national certification and licensure in Oregon as behavior analysts.

We know that Oregon and the nation are experiencing shortages of key mental and behavioral health care providers, including qualified ABA providers. According to recent industry market analysis, there is an immediate need for over 1,300 behavior analysts in Oregon. Given the recent levels of autism diagnosis, the demand for behavior analysts is expected to remain high.

Cascade Behavioral Intervention is committed to recruiting a diverse healthcare workforce with the skills and knowledge to serve our patients with the highest quality of care. We operate in Central and Southern Oregon to create positive outcomes for children with autism and other developmental disabilities through evidence-based ABA intervention. We recently moved to a new larger location and are providing in-home ABA services as well as services at our quality center.

We commit to:

- Providing at least 2 practicum placements each year (estimated value: \$70,000 for 2 placements (\$35,000/year per interventionist);
- Offering our current professional staff as supervisors in the clinical setting, as well as potentially contributing as adjunct faculty members (estimated value for BCBA 1.5 hours per week: \$125 an hour for 1.5 hours every week / \$6,500 year);
- Advising on the needs of industry in relation to the development of curriculum;
- Employing Oregon Tech ABA graduates who successfully complete the program.

Oregon Institute of Technology is leading the way in Oregon in the development of applied behavior analysts graduates who have applied skills and can add value to their employers on the first day they are hired. We look forward to having access to this new and emerging talent pool.

GRANT AGREEMENT #16-0429-02 EXHIBIT A

Thank you for your time and consideration of this worthy proposal.

Sincerely,



Jerry Tucker, MS, BCBA
Director/Division
Lataste Behavioral Intervention LLC

APPENDIX G
BEHAVIOR ANALYSIS ACCREDITATION BOARD WORKSHEET AND
BEHAVIOR ANALYST CERTIFICATION BOARD VERIFICATION FORM

Appendix G

Behavior Analysis Accreditation Board (BAAB) Content Standards x Course Worksheet

(BAAB Accreditation Standards <https://baab.abainternational.org/apply/accreditation-standards.aspx>)

Behavior Analyst Certification Board (BACB) BCBA Course Content Verification Form

	Content Area ¹	Course #	Course Title	Credits	Contact Hours in Content Area	Mode of Instruction ²
1.	Principles of Behavior	ABA 511	Foundations of ABA I	3	10	Web-Assisted
2.	Principles of Behavior	ABA 512	Foundations of ABA II	3	15	Web-Assisted
3.	Principles of Behavior	ABA 526	Behavioral Assessment	3	5	Web-Assisted
4.	Principles of Behavior	ABA 531	Behavior Change I	3	5	Web-Assisted
5.	Principles of Behavior	ABA 532	Behavior Change II	3	5	Web-Assisted
6.	Principles of Behavior	ABA 535	Special Topics in ABA	3	5	Web-Assisted
7.					(45)	
8.	Research Methods	ABA 512	Foundations of ABA II	3	15	Web-Assisted
9.	Research Methods	ABA 525	Research Methods in ABA	3	30	Web-Assisted
10.					(45)	
11.	Conceptual Analysis	ABA 511	Foundations of ABA I	3	10	Web-Assisted
12.	Conceptual Analysis	ABA 521	Ethics and Professional Issues I	3	5	Web-Assisted
13.	Conceptual Analysis	ABA 577	Radical Behaviorism	3	30	Web-Assisted
14.					(45)	
15.	Applied Behavior Analysis	ABA 522	Ethics and Professional Issues II	3	10	Web-Assisted
16.	Applied Behavior Analysis	ABA 526	Behavioral Assessment	3	25	Web-Assisted
17.	Applied Behavior Analysis	ABA 531	Behavior Change I	3	25	Web-Assisted
18.	Applied Behavior Analysis	ABA 532	Behavior Change II	3	25	Web-Assisted
19.	Applied Behavior Analysis	ABA 535	Special Topics in ABA	3	5	Web-Assisted
20.					(90)	
21.	Basic Behavior Analysis	ABA 511	Foundations of ABA I	3	15	Web-Assisted
22.	Basic Behavior Analysis	ABA 515	Basic Behavior Analysis	3	30	Web-Assisted
23.					(45)	
24.	Ethics	ABA 521	Ethics and Professional Issues I	3	25	Web-Assisted
25.	Ethics	ABA 522	Ethics and Professional Issues I	3	20	Web-Assisted
26.	Supervised Experiential Learning	ABA 598	Intensive Practicum	2	20	Web-Assisted
27.	Supervised Experiential Learning	ABA 598	Intensive Practicum	2	20	Web-Assisted
28.	Supervised Experiential Learning	ABA 598	Intensive Practicum	2	20	Web-Assisted
29.	Thesis or equivalent	ABA 599	Thesis	1	10	Web-Assisted
30.	Thesis or equivalent	ABA 599	Thesis	1	10	Web-Assisted
31.	Thesis or equivalent	ABA 599	Thesis	1	10	Web-Assisted
32.					(90)	

¹ Enter one of the following content areas for each submission: Principles of Behavior | Research Methods | Conceptual Analysis | Applied Behavior Analysis | Basic Behavior Analysis | Ethics | Supervised Experiential Learning | Thesis or Equivalent

² See 9-100 for mode of instruction definitions.

Board Certified Behavior Analyst Coursework Evaluation Form ver. 7/13

BCBA COURSE CONTENT VERIFICATION FORM – FOURTH EDITION

Applicant Name: _____
Institution Name: Oregon Institute of Technology

CONTENT AREA AND REQUIRED NUMBER OF CLASSROOM HOURS Institution is on the following system (check one): <input type="checkbox"/> Semester <input checked="" type="checkbox"/> Quarter <input type="checkbox"/> Other (attach description)	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8	Course 9	Total Hours for Content Area
	ABA 521 Ethics & Prof. I	ABA 511 Found. of ABA I	ABA 512 Found. Of ABA II	ABA 525 Research Methods in ABA	ABA 526 B1 Assessment	ABA 531 Behavior Change I	ABA 532 Behavior Change II	ABA 522 Ethics & Prof II	ABA 535 Special Topics in ABA	
A 45 hours in ethical & professional conduct	25							20		45
B 45 hours in concepts & principles of behavior analysis		30	15							45
C 25 hours in measurement (including data analysis)			10	15						25
20 hours in experimental design			5	15						20
D 30 hours in identification of the problem & assessment					30					30
45 hours in fundamental elements of behavior change & specific behavior change procedures						20	25			45
10 hours behavior change systems						5			5	10
10 hours in intervention & behavior change considerations						5	5	5		10
10 hours in implementation, management & supervision							5	5		10
E 30 hours in discretionary	5								25	30
Total Hours of Instruction	30	30	30	30	30	30	30	30	30	TOTAL 270