

**UNIVERSITY OF LOUISVILLE  
PROPOSAL FOR CERTIFICATE PROGRAMS OF LESS THAN 24 HOURS  
OF UNIVERSITY CREDIT [NOT REQUIRING COUNCIL ON  
POSTSECONDARY EDUCATION (CPE) APPROVAL]**

Graduate Certificate in Autism and Applied Behavior Analysis  
Title of Certificate

College of Education and Human Development  
Unit Submitting Proposal

*A collaboration between the Special Education Department at the College of Education and  
Human Development and the Kentucky Autism Training Center*

Special Education  
Department

Special Education  
Academic Major

2011-2012 Academic Year  
Proposed Starting Date

Drs. Monica E. Delano, & Robert Pennington  
Certificate Program Coordinators

Approved by  
Board of Trustees on

\_\_\_\_\_

Date

President:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## **PROPOSAL GUIDELINES FOR CERTIFICATE PROGRAMS OF LESS THAN 24 HOURS OF UNIVERSITY CREDIT [NOT REQUIRING COUNCIL ON POSTSECONDARY EDUCATION (CPE) APPROVAL]**

### **I. EDUCATIONAL OBJECTIVES AND RATIONALE**

#### **1.1 Program Objectives and Rationale**

Both the country and the Commonwealth are challenged by the increased prevalence of autism spectrum disorders. According to the Centers for Disease Control and Prevention, the prevalence of autism spectrum disorders has risen to 1 in every 110 births in the United States and almost 1 in 70 boys. The rise in the number of individuals diagnosed with autism has created an urgent need for highly skilled professionals in several related fields including education, speech language therapy, psychology, social work and occupational therapy. The Autism Society of America (ASA) estimates that the lifetime cost of caring for a child with autism ranges from \$3.5 million to \$5 million. ASA also reports that the United States is facing almost \$90 billion annually in costs related to autism spectrum disorders. The key to reducing costs and improving the quality of life for individuals with autism and their families is early diagnosis and effective interventions. Effective interventions lead to increased independence and self-determination for people with autism spectrum disorders and, in many cases, a decreased reliance on support services. In order to develop quality services for individuals on the autism spectrum, public schools, clinics, vocational programs and community programs need highly skilled professionals with advanced knowledge in both autism specific interventions and in the science of applied behavior analysis.

The purpose of this program is to provide professionals with advanced knowledge in applied behavior analysis, communication, behavior consultation and evidence-based practices for individual on the autism spectrum. Currently, there is no program in Kentucky which focuses both on applied behavior analysis and autism spectrum disorders. Since applied behavior analysis forms the basis of the most effective interventions for individuals with autism spectrum disorders, this dual emphasis will facilitate the development of highly effective professionals. School districts statewide as well as community service providers are seeking to train their workforce in behavior analytic interventions for individuals with autism. This demand for training is also evident nationally. The aim of this certificate program is to provide professionals with the knowledge and skills necessary to develop quality services for individuals with autism across the lifespan (e.g., early intervention, school programs, vocational programs, etc.).

#### **1.2 Internal/External Influences**

##### *Relevance to the University Mission*

The proposed certificate program advances the University's mission, complements existing programs within the University and is responsive to the local, state and national need for professionals with advanced training in autism and applied behavior analysis. **In 2008 The University of Louisville's Board of Trustees approved the development of the Uof L Autism Center, a multi-disciplinary provider of research, educational leadership, and clinical services to children with autism and their families. Through this approval President Ramsey and the University of Louisville made a critical commitment to individuals, families and professionals who are impacted by autism and set a course for the university to become a national leader in autism research and practice. One aspect of this**

**commitment is to provide educational leadership. The proposed autism certificate program will enable U of L to become a leader in autism education through collaboration between the Kentucky Autism Training Center (KATC) and the Special Education Department. The KATC is part of the College of Education and Human Development as well as the newly established U of L Autism Center. When planning the certificate program, special education faculty collaborated with KATC staff to make certain the content of the certificate would build upon and not duplicate the trainings provided by the KATC. Currently, the KATC provides basic training in evidence-based practices that are effective with individuals on the autism spectrum. These trainings provide professionals with introductory knowledge in autism and applied behavior analysis and primarily target school professionals and families. The proposed certificate program compliments the work of the KATC by providing specialized, advanced training to a wider variety of professionals. An advantage of being associated with the KATC and the U of L autism center, is the opportunity for students in the certificate program to benefit from the expertise of U of L researchers and practitioners through guest lectures, observations and ongoing research. This will enable the University of Louisville to develop leaders with expertise in autism who will be capable of planning, implementing and supervising programs that serve individuals with autism across the lifespan. These leaders will have the ability to significantly change the quality of services statewide for individuals with autism and their families. This certificate program also has the potential of preparing individuals who will go on to complete a Ph.D. and begin careers as autism researchers or community leaders.**

#### *Demand for the Program*

The increased prevalence of autism spectrum disorders challenges local early intervention services, school districts and adult service providers. The rise in the number of individuals diagnosed with autism has created an urgent need for highly skilled professionals in several related fields including education, speech language therapy, psychology, social work and occupational therapy. Our community partners (e.g., Jefferson County Public Schools, Ohio Valley Educational Cooperative, Kentucky Department of Education) are in great need of professionals with the knowledge necessary to provide high quality services to this population and remediate deficits in basic communication, social skills, and daily living skills. These needs are not only local, but also statewide and national. With 1 in 110 births in the United States and almost 1 in 70 boys diagnosed with autism, the need for high qualified professionals is both urgent and long term. Since certificate courses are currently offered online, the program will be able to respond to demand throughout Kentucky and across the country.

#### *Employment Prospects for Students*

It is anticipated that the majority of students entering the certificate program will have professional jobs in education, speech language therapy, psychology, social work or occupational therapy. However, there is a need for professionals in each of these fields to provide leadership in the area of autism and facilitate training that will improve the quality of services for individuals impacted by autism. Graduates of the certificate program would be capable of providing such leadership, directly serving individuals and families and training other professionals to work with individuals with autism. School districts, clinics and adult service providers would benefit from employing these individuals. **Thus, this certificate will provide an additional credential to individuals who hold professional licenses. Rather than just taking courses about autism, earning this formal credential will serve as a means of identifying professionals who are**

**knowledgeable about behavioral interventions for individuals on the spectrum and capable of designing quality services for people with autism. It is critical for families to make certain that professionals who provide services to their family members with autism are highly skilled in behavioral interventions and knowledgeable about autism spectrum disorders. Historically, identifying qualified professionals to serve individuals with autism has been a challenge for families and agencies. A formal certificate from the University of Louisville will serve as a means for professionals to document their expertise and families to locate qualified professionals.**

*Responsiveness to Student and Faculty Needs*

Teacher candidates and students in other fields within the College of Education and Human Development will likely encounter many individuals with autism during their careers. Students preparing for careers in other related professions (e.g. social work, psychology, speech language therapy, occupational therapy) will also work with many individuals with autism. Without proper training, they will be woefully unprepared to provide effective services to these individuals. Without effective services individuals with autism may not fully develop the ability to communicate and function as independently as possible. **Currently the College of Education offers a degree in special education, a course in applied behavior analysis and a few courses related to autism, but there is not a sequence of intensive graduate level classes which develop advanced knowledge in autism and applied behavior analysis. Many students and professionals working in the community have requested such classes, but desire a program that does not require earning a master's degree. This program provides the content professionals desire and requires fewer credit hours than a degree. Thus it is most responsive to students' needs and preferences. In order to maximize access to certificate classes for working adults, the special education department currently offers these courses in online and face-to-face formats. This flexible course delivery model will provide students in the certificate program with the opportunity to select the delivery option that best meets their needs. Since these courses are currently offered students who are accepted into the certificate program can enroll in already-existing courses. In addition, it is anticipated that the demand for the program and its flexibility will make it attractive to many professionals. Consequently the certificate program will help increase graduate enrollment in the special education department. Increasing declining graduate enrollment is a high priority set by the dean and the department chair.**

In addition, the special education program in the College of Education and Human Development is uniquely qualified to provide such a program to the state. There are several faculty members in the special education department who are recognized nationally as experts in applied behavior analysis and positive behavior supports. Also, there are three tenure track faculty members who have expertise in autism and applied behavior analysis and have research agendas which focus on developing interventions for individuals with autism. It is unusual for a program to have more than one faculty member with this expertise. The proposed certificate program would enable faculty to merge their research and practice to improve the quality of professionals serving individuals with autism.

*Impact the certificate program will have on other programs within the University*

The proposed certificate program will complement current programs in education, social work, psychology and speech language pathology by providing students an advanced certificate program that will extend their professional skills. It is anticipated that many graduates of these degree programs will return to U of L to complete the certificate program because they will desire advanced training in applied behavior analysis and autism. It is also anticipated that some students

who complete the certificate program will become interested in pursuing a Ph.D. with an emphasis in autism because of the knowledge of autism research they will acquire through the certificate program.

*Exceptional Circumstances that Favor the Development of this Program*

In 2008 The University of Louisville's Board of Trustees approved the development of the Uof L Autism Center, a multi-disciplinary provider of research, educational leadership, and clinical services to children with autism and their families. Through this approval President Ramsey and the University of Louisville made a critical commitment to individuals, families and professionals who are impacted by autism and set a course for the university to become a national leader in autism research, education and practice. This makes the development of an autism certificate program both timely and critical in supporting the university's mission. In addition, the Kentucky Autism Training Center (KATC) is affiliated with the special education department in the College of Education and Human Development and part of the University of Louisville Autism Center. The KATC provides support to school districts and families statewide. The director of the center is a faculty member in the special education program. A collaboration between the center and the special education program will support the center's mission of improving the quality of services to individuals with autism and provide students in the certificate program with access to professional workshops and conferences offered through the center.

*Offering a Certificate Program Rather Than a Degree*

Many students and professionals working in the community have requested advance classes in autism, but desire a program that does not require earning a master's degree. The proposed certificate program provides the content professionals desire and requires fewer credit hours than a degree. Thus it is most responsive to students' needs and preferences. Offering a certificate program also has several advantages over offering another degree program. First, a wide variety of professionals statewide serve individuals with autism across the lifespan. A certificate program makes it possible to offer advanced training in applied behavior analysis and autism to professionals in several fields, thus improving the quality of services individuals with autism will receive in education, speech language, occupational therapy, social work, and psychology. Second, the certificate program will build upon current degree programs. For example, the special education program offers graduate degree programs which incorporate some coursework related to autism. The certificate classes will build upon the knowledge and skills that applicants have obtained through degree programs. Graduates of these degree programs as well as other professional programs within the University, may seek the advanced training offered by the proposed certificate program. In addition, a certificate program enables professionals to complete a series of classes which focus exclusively on providing training in autism and applied behavior analysis without needing to take additional classes that are unrelated to these areas. Offering a certificate program may be more marketable than a degree program. This is important because there is a great need to increase graduate enrollment in the special education program. Also, the certificate will provide a more efficient means of training professionals from many disciplines. Finally, a certificate program which offers advanced training in autism and applied behavior analysis will allow the University of Louisville to be competitive with similar research universities (e.g., University of Kansas, Florida State University, Penn. State University, SUNY-Buffalo). **Offering a combined focus in autism and applied behavior analysis, the proposed certificate program will enable the University of Louisville to set an example for other sister institutions around the country. This combined focus on autism and applied behavior analysis is noteworthy and a great strength of the proposed program. Nationally, many graduate programs in applied behavior analysis are housed in psychology departments while autism specific courses are offered in special**

education departments. Consequently, students develop expertise in autism or applied behavior analysis and rarely have an opportunity to study both simultaneously. This is most unfortunate because all professionals working with individuals with autism must be skilled in behavioral interventions and thus need intense training in applied behavior analysis. Likewise, many behavior analysts serve individuals with autism but lack specific knowledge about autism. This likely has a negative impact on their effectiveness with clients on the autism spectrum. Since U of L's special education faculty consists of professors with expertise in both autism and applied behavior analysis, U of L has a unique opportunity to develop a program that can provide training in two critical and interrelated areas of study. The certificate program will be available to professionals in a variety of fields including psychology and education. Offering a certificate, rather than requiring a degree will make the program more appealing to individuals in several disciplines because it will serve to increase their knowledge without the requirements of a degree in special education.

## II. PROGRAM DESCRIPTION

### 2.1 Admission

*a. Requirements.* Applicants to the certificate program will meet the standards of general admission to the University and the College of Education and Human Development (e.g. GRE scores of 800 or better, GPA 2.75). Applicants will also meet the following requirements:

- A Bachelor's or advanced degree in education, psychology, speech language pathology, occupational therapy or social work.
  - Rationale: The purpose of the certificate program is to build on the skills of professionals who are serving individuals with autism. The courses are graduate level classes and require basic knowledge related to autism and autism related services
- Professional Certification / License in a field related to autism (e.g., education, psychology, speech language pathology, occupational therapy or social work)
  - Rationale: There is a great need to improve the statewide capacity to provide effective services to individuals with autism. The certificate program can most effectively respond to this need by targeting practicing professionals or licensed individuals who are entering professional practice
- Current employment working with individuals with ASD
  - Rationale: The purpose of the certificate program is to improve the quality of services by teaching professionals to apply the most current autism research to their practice. Therefore, as students take classes it is critical that they are simultaneously engaged in work with individuals with autism. This will allow them to learn to implement interventions with fidelity and apply research to practice.
- Statement of Professional Goals Related to Working with Individuals Impacted by Autism
  - Rationale: The certificate program will prepare highly skilled professionals. It is important that the applicants' goals are consistent with this mission.
- In addition to letters of recommendation required by the college, 2 letters of recommendation related to the applicant's work with individuals with autism
  - Rationale: The certificate program is developing advanced skills and knowledge. Thus applicants must already have experience with individuals with autism.
- Grade of "B" or better in required prerequisite courses within the past three years (EDSP 644 Applied Behavior Analysis; EDSP 670 Autism: Introduction and Understanding)

- Rationale: Since the courses in this certificate program are advanced, basic knowledge of applied behavior analysis and autism is necessary to be successful in certificate courses. Since the field of autism changes rapidly, it is essential that the applicant completed these prerequisite courses within the past 3 years.

*b. Documentation.*

- Transcripts of previous degrees / courses: This will enable the admissions committee to verify degree status and completion of prerequisite courses
- Professional license: This will enable the admissions committee to verify that applicants have met the requirements for a license in their field.
- Letters of Recommendation: Provide verification of previous work with individuals with autism
- Letter from current professional supervisor verifying employment with agency serving individuals with autism. This will verify that the applicant will be working with individuals with autism during their program
- Professional statement: This will enable the admissions committee to assess the applicants' writing skills and make certain their goals are consistent with the goals of the program

*c. Potential Exceptions to the Admissions Requirements*

*Parents / Guardians of Individuals with Autism.* Part of the mission of the University of Louisville Autism Center and the Kentucky Autism Training Center is to support families impacted by autism. To be consistent with this mission, admission requirements may be modified for parents and guardians of individuals with autism. Often parents and guardians of individuals with autism seek training so that they can learn to communicate with their family member with autism and support their development. However, typically family members are not professionals in a field related to autism. Therefore, these applicants would be expected to meet the following requirements:

- *Bachelor's degree or advanced degree* as evidenced by transcripts. A degree provides evidence of applicants' ability to be successful in college classes.
- *Statement of personal goals explaining a rationale for wishing to obtain the certificate.* This statement would be in lieu of a professional statement.
- Grade of "B" or better in required prerequisite courses within the past three years (EDSP 644 Applied Behavior Analysis; EDSP 670 Autism: Introduction and Understanding) as evidenced by transcript
- *Letters of recommendation (2)* which describe applicants' commitment to learning about autism and their ability to complete graduate courses
- *NOTE:* Though admissions requirements will be modified for these applicants, parents / guardians accepted into the certificate program will be required to meet all certificate standards and requirements.

*d. Responsibility Assessing Applicants' Qualifications*

The certificate admissions committee will be responsible for reviewing appropriate documents and judging the applicants' qualifications for admission to the certificate program. Like other programs offered through the special education department, this committee will operate under the supervision of the special education department chair and consist of the program director and tenured or tenure track faculty who are engaged in teaching courses in the certificate program. A minimum of three faculty members will review each applicant's admissions materials before a decision is rendered.

*e. Restricted Admissions*

Given current resources, a maximum of twenty applicants will be admitted into the program each year. An additional slot will be reserved for applicants who are parents or guardians of individuals with autism. Selection among applicants who meet minimum program admission standards will be made on the basis of competitive GRE scores, competitive GPA and the degree that their current professional role impacts individuals with autism. Parent applications will be assessed on a “first come first serve” basis with the application window being two-months in duration.

**It important to note that over the past 5 years the special education department has added several faculty lines related to applied behavior analysis and autism. In recent semesters, graduate enrollments in the special education department have declined. Given the increase in faculty and the need to increase graduate enrollments, the current faculty and staff can meet the demands (e.g. advising, teaching, admissions, etc.) of this program without additional resources. The department chair, the college curriculum committee and the dean’s office have approved of this program going forward without the need for additional resources.**

## **2.2 Curriculum**

The certificate program must include a minimum of 12 semester hours and a maximum of 23 semester hours. The program must be clearly identified and labeled as a certificate program.

### *Certificate Program Curriculum*

- a. There are two pre-requisite courses to the certificate program to ensure that applicants possess background knowledge to enable them to be successful in the program. The program curriculum consists of several phases of professional development

**Phase 1** (Pre-requisite experiences / prior to admission): Candidates complete pre-requisite courses in which they are introduced to applied behavior analysis and the characteristics of autism spectrum disorders, focusing on KY Standards for content and professional growth, and the CEHD Diversity Standard (EDSP 670, EDSP 644).

**Phase 2** (Foundational professional experiences): Candidates expand on their content knowledge and learn single subject design. This phase provides students with the knowledge and skills necessary to design and implement evidence-based interventions with fidelity. Students acquire relevant knowledge of current research and skills in providing direct services to individuals with autism. Courses include: EDSP 669 Single Subject Research Methods and Design, EDSP 671 Autism: Methods and Teaching Strategies, and EDSP 646 AAC and a Behavior Analytic Approach to Communication.

**Phase 3** (Advanced professional knowledge) Candidates develop advanced skills in behavior analysis and develop skills in behavior consultation and staff training. Courses include: EDSP 650 Advanced Applied Behavior Analysis and EDSP 651 Behavior Consultation

**Phase 4** (Culminating Experience) This phase provides students an opportunity to apply the knowledge and skills acquired in Phase 2 and Phase 3 of the program. Students design and implement an intervention program that incorporates elements of basic and advanced evidence-based practices as well as behavior consultation. Action moves to advocacy, as candidates focus their experiences on supporting

the learning of individuals on the autism spectrum. EDSP 673 Supporting Individuals with HFA / Asperger's Syndrome.

### Sequence of Courses

<b>FALL (1) SEMESTER</b>		
<b>Prerequisite Courses</b>		
EDSP 644 Applied Behavior Analysis		Prerequisite to program admission
EDSP 670 Autism: Introduction and Understanding		Prerequisite to program admission
<b>SPRING (1) SEMESTER</b>		
EDSP 671 Autism: Methods & Teaching Strategies	3.0	Required
EDSP 669 Single Subject Research	3.0	Required
<b>SUMMER (1) SEMESTER</b>		
EDSP 646 Behavior Analytic Approach to Communication	3.0	Required
<b>FALL (2) SEMESTER</b>		
EDSP 650 Advanced Applied Behavior Analysis	3.0	Required
EDSP 651 Behavior Consultation	3.0	Required
<b>SPRING (2) SEMESTER</b>		
EDSP 673 Supporting Individuals with HFA / Asperger's Syndrome	3.0	Required
<b>TOTAL SEMESTER HOURS REQUIRED</b>	<b>18</b>	

#### *e. Capstone Projects*

During their last semester in the certificate program and when enrolled in EDSP 673, students design and implement an intervention program that incorporates elements of basic and advanced evidence-based practices (see Appendix A).

#### *f. Course schedule.*

All courses that are part of the certificate program are offered at least once per year. EDSP 646 & EDSP 669 are offered at least twice per year. **In order to maximize access to certificate classes for working adults, the special education department currently offers these courses in online and face-to-face formats. This flexible course delivery model will provide students in the certificate program with the opportunity to select the delivery option that best meets their needs. Since these course are currently offered students who are accepted into the certificate program can**

**enroll in already-existing courses. In addition, it is anticipated that the demand for the program and its flexibility will make it attractive to many professionals. Consequently the certificate program will help increase graduate enrollment in the special education department. Increasing declining graduate enrollment is a high priority set by the dean and the department chair.**

*g. Course delivery.*

Students are required to take courses in a prescribed sequence (see chart above). Courses are taught in the evening during fall, spring and summer semesters. Courses are available in a online distance education format.

### **2.3 Experiential Components**

**The purpose of the certificate program is to improve the skills of working professionals in the in field of autism. In each course students are introduced to research based practices that they can immediately apply to their professional practice. Fieldwork assignments are embedded into each course in the program to support students in making direct connections between research and their professional practice. Since some students may live outside of the Louisville Metro area, faculty will observe students through video tapes and live online observations via skype. Students will also submit verification of employment from their supervisor. It is important to note that the special education program already uses these methods to monitor field sites for courses in the certificate program. The intent of the program is to help close the gap between research and practice and have a direct connection to the provision of services in the community. Field assignments provide the means to accomplish this goal.**

### **2.4 Accreditation/Certification**

**This program will be appropriate for professionals from several fields (education, psychology, social work, etc.). At this time, the program will not seek accreditation from a professional organization. After the University approves the program, it will be eligible for accreditation and faculty will submit an application for accreditation by the Association of Applied Behavior Analysis. The program must be operating before accreditation. Faculty are currently preparing the accreditation materials.**

### **2.5 Evaluation**

Students from a variety of disciplines will earn a certificate indicating that they have successfully completed advanced training in autism and applied behavior analysis. The special education department will collect data from graduating students indicating their professional field and current employment. These data will provide the program with information about how the program is impacting service delivery to individuals with autism spectrum disorders. These data will also guide recruitment efforts. Current departmental student workers and graduate assistants will be able to assist with this task.

Students will demonstrate the ability to apply the knowledge and skills acquired in the program to the design and implementation of an intervention program for an individual with autism spectrum disorder. Students will present the results of this program to the program faculty in the form of a

written paper and oral presentation. Program faculty will evaluate the project using the form in Appendix A.

### III. ADMINISTRATION OF CERTIFICATE PROGRAMS

#### **3.1 The Program:**

a. The special education office will be responsible for the administration of the program, record keeping and accountancy.

b. **The proposed certificate program will offer advanced training in autism and applied behavior analysis and enable the University of Louisville to be competitive with similar research universities (e.g., University of Kansas, Florida State University, Penn. State University, SUNY-Buffalo). The proposed certificate's combined focus in autism and applied behavior analysis is unique and will enable the University of Louisville distinguish itself from other certificate programs in Kentucky and to set an example for other sister institutions around the country. This combined focus on autism and applied behavior analysis is noteworthy and a great strength of the proposed program. Nationally, many graduate programs in applied behavior analysis are housed in psychology departments while autism specific courses are offered in special education departments (e.g., Florida State University). Consequently, students develop expertise in autism or applied behavior analysis and rarely have an opportunity to study both simultaneously. This is most unfortunate because autism intervention research suggests that all professionals working with individuals with autism must be skilled in behavioral interventions and thus need intense training in applied behavior analysis. Likewise, many behavior analysts serve individuals with autism but lack specific knowledge about autism. This likely has a negative impact on their effectiveness with clients on the autism spectrum. Since U of L's special education faculty consists of professors with expertise in both autism and applied behavior analysis, U of L has a unique opportunity to offer an advanced program that can provide training in two critical and interrelated areas of study. The certificate program will be available to professionals in a variety of fields including psychology and education. Offering a certificate, rather than requiring a degree will make the program more appealing to individuals in several disciplines because it will serve to increase their knowledge without the requirements of earning a degree in special education.**

It is important to note how the proposed certificate program differs from the three other autism certificate programs offered in Kentucky. Though the programs are comparable in terms of credit hours, there are two major differences between U of L's proposed certificate in autism and applied behavior analysis and offerings at other Kentucky universities: course level and goals. The programs offered at ECU, Western and UK offer an excellent introduction and foundation in autism, but do not provide advanced courses. For example, ECU's program enables students take one basic course from each of several departments (e.g. 1 course in applied behavior analysis, 1 course in language disorders, etc.). Western's program resides in one department, but advanced study in applied behavior analysis is not present. Likewise UK requires one course in applied behavior analysis. In fact, two courses in ECU's and two courses in UK's program, could actually serve as pre-requisites to U of L's proposed certificate program. (U of L's proposed certificate program requires as pre-requisites a basic course in applied behavior analysis and a basic introductory autism class). In contrast, U of L's program offers advanced courses that each intertwine the study of autism and applied behavior analysis.

**All six certificate courses build advanced knowledge in applied behavior analysis and autism and meet standards of the behavior analyst certification board. This is not the case in any of the other programs. The goal of U of L's program is not to provide practitioners with the basic skills to serve individuals with autism. The KATC offers basic trainings and the other three autism programs provide an excellent foundation in the study of autism. U of L's program requires a working knowledge of the basics of applied behavior analysis and the characteristics of autism before entry. The program itself consists of advanced coursework. Therefore, the goal of U of L's program is to produce highly skilled leaders in the field of autism who are experts in behavioral interventions for individuals on the spectrum. This goal supports President Ramsey's and the Board of Trustee's objective for U of L to become a national leader in autism research, education and practice.**

**3.2 Reviews:**

All certificate programs will be reviewed in accordance with guidelines established by the University Program Review Committee.

**3.3 Programs Must Be Approved By:**

Programs should be submitted by the unit Dean to the Provost. The Provost's Office will coordinate the review process.

- a. Unit appropriate curriculum committee(s)
- b. Unit Dean
- c. Faculty Senate Budget Committee
- d. Faculty Senate Academic Programs Committee
- e. Graduate Council (graduate programs only)
- f. Faculty Senate
- g. Provost
- h. Board of Trustees

**IV. RESOURCES****4.1 Resources Required**

a. **Resources:** Courses for this certificate program are presently offered through the special education program in the College of Education and Human Development. The courses are currently taken by students in a special education Master's degree program. However, graduate enrollment has sharply declined in the last 4 semesters. Two of the certificate courses offered this semester have fewer than 10 students each. Increasing graduate enrollment is a priority for the department. Consequently, adding 20 certificate students to the present courses is possible and in fact desired. Since the department currently offers the courses, no additional facilities will be necessary.

b. Please see attached statement from the University Library

c. Faculty

1) Please see attached brief vita for primary program faculty

2) Tenure track faculty in the special education program currently teach courses in the certificate program because the courses are required for a current M.Ed. program in special education. Teaching certificate courses is already part of the program faculty's instructional responsibilities which consists of teaching a 3:2 course load.

**4.2 Budget Request**

a. This certificate program is comprised of courses that are currently part of the special education program's course offerings. Given the decline in graduate enrollment and the need to recruit graduate students, the current faculty can meet the demands of students in the proposed certificate program (e.g., teaching, advising, etc.). The department chair has reviewed course schedules and faculty course assignments and concluded that no additional resources are required to implement this program.

**4.3 Financial Aid**

**Students in this program will be working professionals. The program enables them to add a credential. Therefore the program is not preparing students for a specific job. Rather students will use the expertise gained from the program in their current job and discipline. Therefore, we are not requesting DOE approval.**

**Is DOE approval desired for the program? \_\_\_\_yes X no**

If yes, after the Board of Trustees approves the program, the Provost's Office will notify the Financial Aid Office which immediately will apply to DOE for financial aid eligibility for this program

Please note that in order for students enrolled in a certificate program (see attached sheet from the Financial Aid Office) to be eligible for federal financial aid, the program must secure approval from the Department of Education (DOE), a process that takes three to six months. Each new certificate program must be approved separately.

**V. MAJOR REVISIONS OF CERTIFICATE PROGRAMS****5.1 Revisions**

Revisions of certificate programs that substantially alter the purpose of the program must be submitted as a new proposal.

**VI. PROGRAM DELETION PROPOSALS****6.1. Deletions**

- A. Certificate title, unit responsible for program
- B. Rationale for deleting the program
- C. Concurrence of appropriate committees, Dean, etc.

## APPENDIX A

### CAPSTONE INTERVENTION PROJECT RUBRIC

#### Proposal for project and Supporting Items

Each student is required to write an applied intervention proposal. The proposal should use a single subject research design, be written in APA style (2009), and review the most recent body of literature (minimum of 5 data based studies) directly related to the purpose of the study.

#### Implementation of the Behavior Change Project

Each student will implement the proposed research project, conduct an analysis of the results, prepare a written manuscript and make an oral presentation to the program faculty.

	<b>Exceeds Standards</b>	<b>Meets Standards</b>	<b>Little Evidence of Meeting Standards</b>
<b>Standards</b>	<b>Target</b>	<b>Acceptable</b>	<b>Unacceptable</b>
<b>Introduction</b> CEC/DDA 1, 9 KTS 10	Introduction is thorough, references are current and presents a strong rationale for the proposed procedures	Introduction is thorough, some references are current and presents a moderate rationale for the proposed procedures	Introduction is thorough, few references are current and presents a weak rationale for the proposed procedures
<b>Research Question(s)</b> CEC/DDA 1, 9 KTS 2	Research question(s) are clearly stated, supported by and extend the previous research, and contribute to research in the field of special education	Research question(s) are stated appropriately and are supported by previous research and may extend/contribute to research in the field of special education	Research question(s) are not stated or are not clear. The questions are not supported by previous research and do not extend/contribute to research in the field of special education
<b>Procedures</b>	The description of procedures is complete and clearly	The description of procedures is missing a few	The description of procedures is missing several components

<p><b>CEC /DDA 4, 7, 8</b></p> <p><b>KTS 2, 5</b></p>	<p>operationalized. The procedures are conceptually systematic.</p>	<p>components and/or not clearly operationalized. The procedures have loose linkage to the principles from which they were derived.</p>	<p>and/or is not clearly operationalized. The procedures are not conceptually systematic.</p>
<p><b>Data Analysis</b></p> <p><b>CEC/DDA 8</b></p> <p><b>KTS 5, 7</b></p>	<p>The data are clearly displayed on graph/s. The narrative provides a clear description of all relevant results.</p>	<p>The graphic display contains errors.</p> <p>The narrative provides a description of at some relevant results.</p>	<p>The graphed data are unclear as to what they represent. The narrative provides little assistance in understanding the results.</p>
<p><b>Conclusion/ Discussions</b></p> <p><b>KTS 7</b></p>	<p>Summary and conclusion is detailed, consistent with data reported, and includes detailed explanation of future research/teaching implications.</p>	<p>Summary and conclusion lacks some detail, is consistent with data reported, and includes explanation of future research/teaching implications</p>	<p>Summary and conclusion lacks detail, is not consistent with data reported, and includes explanation of future research/teaching implications that are not logical.</p>
<p><b>Style/Format</b></p> <p><b>CEC/DDA 9</b></p> <p><b>KTS 10</b></p>	<p>Proposal is written in APA style and has no errors in grammar/spelling. The writing is clear, easily understood, and organized appropriately.</p>	<p>Proposal is written in APA style with minimal errors in grammar/spelling. The writing is understandable and organized.</p>	<p>Proposal is not or inconsistently written in APA style and/or has multiple grammar/spelling errors. The writing is confusing at times and/ or not well organized.</p>

## APPENDIX B

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March 25, 2011

Dr. Connie Shumake

Office of the Provost

University of Louisville

Louisville, KY 40292

Dear Connie:

The proposal for the Graduate Certificate Program in Autism and Applied Behavior Analysis has been reviewed by the University Libraries. Based on a comparison with several of our benchmark institutions, the Libraries collection of monographs, journals, and electronic resources are mostly adequate to support the proposed program.

The Libraries became a member of the Association of Research Libraries (ARL) in 2002 and we will continue to build collections to support existing programs to the degree possible with available funding.

Sincerely,

Robert Fox, Jr.

Dean, University Libraries

CC: Joanne Webb

Monica E. Delano

Rich Mancil

Robert Pennington

Fannie Cox

James E. Manasco

# EVALUATION OF LIBRARY RESOURCES

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**ESSENTIAL TO THE SUPPORT OF:**

**PROPOSED GRADUATE CERTIFICATE PROGRAM IN AUTISM AND APPLIED BEHAVIOR ANALYSIS**

By

Fannie Cox

Collection Specialist, Education

James E. Manasco

Head, Collection Development

University Libraries

Robert Fox, Jr.

Dean

University Libraries

March 25, 2011

## **OVERVIEW**

The University of Louisville (U of L) Libraries are comprised of five separate libraries: the Ekstrom Library serving the humanities, social sciences, life sciences, business, engineering, physical science, and technology; the Kornhauser Health Sciences Library; the Law Library; the Anderson Music Library; and the Bridwell Art Library. In addition, the University Archives and Records Center is part of the library system. Materials relevant to Autism and Applied Behavior Analysis can be found in Ekstrom and Kornhauser.

The Libraries support the instructional and research needs of almost 22,000 students and nearly 6,000 faculty and staff. The University Libraries are members of the State-Assisted Academic Library Council of Kentucky (SAALCK) and Kentuckiana Metroversity, a consortium of libraries in the Louisville metropolitan area. In addition, the University of Louisville Libraries are a member of the Association of Research Libraries.

A review of library support for an academic program should include a review and analysis of all resources including the collections, services, staffing and facilities. This report provides such a review and analysis, along with recommendations in areas where resources appear to be lacking.

## **COLLECTIONS**

### **I. BOOK COLLECTION**

Table I provides a comparison of library holdings in the relevant subject areas for the University of Louisville Libraries and three other benchmark academic institutions that support Autism and Applied Behavior Analysis degree programs. This data was obtained from the WorldCat Collection Analysis tool.

**TABLE I: Book Holdings Comparison**

<b>Subject</b>	<b>UofL</b>	<b>University of Alabama- Birmingham</b>	<b>Virginia Commonwealth</b>	<b>Wayne State University</b>
Education- Special Aspects of Education- Education of the Exceptional, Gifted & Handicapped	310	417	1061	750
Medicine- Pediatrics- Mental Disorders of Children & Adolescents*	1414	2237	2641	2898

\*Note: This number does not include Kornhauser Health Sciences Library holdings.

While our holdings do not match our benchmark institutions, we are not that far behind. Additional funding would help to close the gap.

## II. PERIODICAL COLLECTION

The University of Louisville Libraries currently receives the following periodicals relevant to the proposed Autism and Applied Behavior Analysis program.

**TABLE II: Periodical Holdings Relevant to Autism and Applied Behavior Analysis**

American educational research journal

American journal of health education / American Alliance for Health, Physical Education, Recreation, and Dance
Anthropology & education quarterly
Applied cognitive psychology
Assessment for effective intervention
Behavior research methods
Business education forum
Campus technology
Career development for exceptional individuals : official journal of Division on Career Development, the Council for Exceptional Children
Childhood education
Children & schools

Classroom interaction newsletter
Classroom notes plus
Computers and composition.
Counselor Education & Supervision
Developmental psychology
Developmental review: DR
Diagnostique
Educating children with exceptionalities
Education & treatment of children
Education & treatment of children
Education + training
Education digest
Education week
Education week's digital directions
Educational administration abstracts
Educational administration quarterly

Educational administration quarterly : EAQ
Educational and psychological measurement
Educational communication and technology : EC & TJ
Educational evaluation and policy analysis
Educational horizons
Educational leadership
Educational measurement, issues and practice
Educational media and technology yearbook
Educational policy
Educational psychologist
Educational researcher : a publication of the American Educational Research Association.
Educational studies.
Educational technology research and development : ETR & D.
Educational technology.
Educational theory.
Educom bulletin.

Educom review.
Equity & excellence in education
Equity & excellence in education : University of Massachusetts School of Education journal.
Exceptional children : journal of the International Council for Exceptional Children.
Exceptionality : the official journal of the Division for Research of the Council for Exceptional Children.
Family relations (e-only)
Focus on exceptional children.
G/C/T.
Gifted child quarterly
Gifted child today magazine
Gifted child today
Group dynamics
Harvard teachers record.
Human learning
Human performance
IEEE Transactions on Education (e-only)

International journal of qualitative studies in education : QSE
International journal of sport psychology
Intervention in school and clinic
Intervention in school and clinic.
Issues in higher education.
Journal for special educators.
Journal for the education of the gifted
Journal of applied behavior analysis
Journal of applied biobehavioral research
Journal of applied developmental psychology
Journal of applied psychology
Journal of career development
Journal of classroom interaction
Journal of curriculum studies.
Journal of early intervention.
Journal of education for business

Journal of education for students placed at risk.
Journal of education
Journal of educational computing research.
Journal of educational psychology
Journal of educational psychology
Journal of educational research.
Journal of elementary science education
Journal of exceptional children
Journal of experimental education
Journal of general education
Journal of learning disabilities
Journal of literacy research
Journal of occupational and organizational psychology
Journal of physical education, recreation & dance
Journal of psychoeducational assessment
Journal of reading behavior

Journal of reading
Journal of research in childhood education : JRCE / Association for Childhood Education International
Journal of school health
Journal of school psychology
Journal of special education
Journal of teacher education
Journal of the Association for Persons with Severe Handicaps : official publication of the Association for Persons with Severe Handicaps
Journal of thought
Learning & behavior: a Psychonomic Society publication
Learning and leading with technology : the ISTE journal of educational technology practice and policy
Learning disabilities research & practice
Learning disabilities
Learning disability quarterly : journal of the Division for Children with Learning Disabilities
Literacy research and instruction
Literacy research and instruction
Measurement and evaluation in counseling and development

Merrill-Palmer quarterly
NACE journal
National Business Education Association yearbook
Organizational behavior and human decision processes
Peabody journal of education : PJE
Peabody journal of education
Performance + instruction
Performance improvement / ISPI, International Society for Performance Improvement.
Philosophical studies in education
Professional psychology: research and practice
Professional school counseling
Psychological science in the public interest: a journal of the American Psychological Society
Psychology and education
Psychology in the schools
Psychology in the schools
QSE. International journal of qualitative studies in education

Quest
Remedial and special education
Remedial and special education : RASE
Research and practice for persons with severe disabilities : the journal of TASH
Review of education, pedagogy, cultural studies
Review of educational research.
Roeper review
School psychology quarterly
School social work journal
Science and children
Science scope / National Science Teachers Association.
Social work in education
Sociology of education
TASH connections
Teaching aids news
Teaching and teacher education

Teaching exceptional children
Technology & learning
TechTrends : for leaders in education & training
The Educational Forum
THE journal : technological horizons in education
The Midwest quarterly
The Physical educator / Physical educator of Phi Epsilon Kappa
Today's school psychologist
Topics in early childhood special education
Urban education
What's working--
YC young children / journal of the National Association for the Education of Young Children

### III. BIBLIOGRAPHIC RESOURCES

Timely access to the current literature is at the heart of an academic program. Bibliographic resources provide access to this literature. Indexes and abstracts constitute the primary bibliographic resource, supplemented by specialized subject bibliographies. Through these bibliographic resources, faculty and students at the University of Louisville can identify books, reports and articles relevant to their studies

and research. The U of L Libraries provides access to most of the major indexes and abstracts in social science fields where the U of L offers degree programs. Those covering literature relevant to a Autism and Applied Behavior Analysis program are listed in Table IV below:

**TABLE III:**

**Major Indexes and Abstracts Covering Literature Relevant to Autism and Applied Behavior Analysis**

Academic Search Premier
Education Full Text
ERIC
ETS Testlink
Evidence-Based Medicine Reviews
Health and Psychosocial Instruments
Health Source - Consumer Edition
HealthSTAR
MEDLINE
Merck Manual of Medical Information - Home Edition
Ovid
ProQuest Direct
ProQuest Dissertations and Theses
Psychology and Behavioral Sciences Collection
PsycINFO
Sciencedirect
Social Sciences Index

Social Services Abstracts
Social Work Abstracts Plus
Sociological Abstracts
Sociological Collection
Web of Knowledge

In addition, the libraries subscribe to many additional databases and resources that cover a more general interest in the field.

## **SERVICES**

### **I. DOCUMENT DELIVERY**

Books and periodicals not held by the U of L Libraries are identified through online databases and the online union catalog, WorldCat, which includes more than 32 million records describing materials owned by libraries around the world. Materials are obtained through the traditional Interlibrary Loan (ILL) service, and supplemented by the University Libraries participation in KUDZU, a consortium of major university libraries in the southeastern United States.

### **II. INFORMATION LITERACY & REFERENCE ASSISTANCE**

Each library within the University of Louisville Libraries offers a program of instruction designed to meet the needs of that library's users. These programs help the users to make effective use of the services and collections in the individual libraries as well as libraries and information resources in general.

The University Libraries also provide reference assistance to faculty and students in locating specific information and verifying bibliographic citations. Reference

assistance is offered most hours the libraries are open and is provided in person, via telephone and by e-mail.

## **STAFFING**

The staffing of the University of Louisville Libraries compares favorably with the benchmark institutions but is low in comparison with ARL libraries. Librarians at the Ekstrom Library and the Kornhauser Health Sciences Library provide users service and serve as liaisons to faculty in various departments.

## **FACILITIES**

The Ekstrom Library has been enhanced recently with the addition of a new wing including a robotic retrieval system.

## **RECOMMENDATIONS**

In general, with judicious use of interlibrary loan, the collections resources of the University of Louisville Libraries are mostly adequate to provide support for the proposed Autism and Applied Behavior Analysis graduate certificate program. The facilities, services and staff of the Ekstrom Library are adequate to meet the needs of the new program.

The U of L Libraries' current holdings, in subject areas relevant to the proposed program do not compare favorably with the holdings of several benchmark institutions. It must be noted, however, that, for the last few years, the general budget for the University of Louisville Libraries has not allowed for the purchase of many monographs due to the tremendous annual increases in periodical and database costs. Also, the

holdings of the Kornhauser Health Sciences Library are not included in these totals, so the number of volumes held would be higher than that given.

We believe that current levels of funding will be sufficient to support the certificate.