Introduction

The FDLRS-USF Multidisciplinary Educational Service Center, titled the Interdisciplinary Center for Evaluation and Interventions (ICEI), is a specialized diagnostic and training center that serves preschool and school-aged children and youth presenting with complex academic, medical, emotional or behavioral concerns. During the 2014-2015 fiscal year, a full range of clinical and support services were provided to primarily central and southwest Florida school districts, specializing in the social and emotional needs of students who present with the most intense, chronic, and durable behavior problems and other complex conditions and who have not yet achieved school success, academically and/or social/emotionally.

The ICEI model uses an interdisciplinary team approach in which multiple disciplines review each case to determine the disciplines to be involved in the evaluation and the intervention plan. The goal of the clinic is to provide support to families and teachers to implement evidence-based interventions that can enhance the likelihood of student success in school. To reach this goal, the clinic uses graduate students in behavior analysis, school and clinical psychology, and psychiatry who provide in-class and in-home support to coach the adults in implementing interventions recommended based on the student diagnostic profile and/or the student’s functional behavior assessment hypothesis.

Required Activities

In accordance with Specific Appropriation 96. Special Categories Grants and Aids, Florida Diagnostic and Learning Resources System Multidisciplinary Educational Service Centers are required to report activities in five areas. These are:

1. The number of children served
2. The number of parents served
3. The number of person participating in in-service education activities
4. The number of districts served
5. Specific services provided

Activities one through four are reported in the summaries below. Table 1 provides information related to non-duplicated counts of individuals. Each student evaluation and consultation included comprehensive services and supports involving multiple disciplines.

Table 1. Unduplicated Numbers Served

<table>
<thead>
<tr>
<th>Categories</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students Served</td>
<td>131</td>
</tr>
<tr>
<td>Parents Served</td>
<td>134</td>
</tr>
<tr>
<td>In-service Participants</td>
<td>104</td>
</tr>
<tr>
<td>Districts Served</td>
<td>11</td>
</tr>
</tbody>
</table>
During the 2014-2015 fiscal year, the USF FDLRS MDC services were provided to the following school districts: Brevard, Charlotte, Desoto, Duval, Hernando, Hillsborough, Pasco, Pinellas, Polk, and Sarasota.

Table 2 displays the specific clinic activities and the quantity of activities provided related to the students, families, and inservices delineated in Table 1.

**Table 2. Specific Services Provided**

<table>
<thead>
<tr>
<th>Activities</th>
<th>Number of Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Disciplinary evaluations and diagnostics for school-aged children and youth.</td>
<td>556</td>
</tr>
<tr>
<td>Recommend strategies and interventions to teachers, families, and school administrators</td>
<td>200</td>
</tr>
<tr>
<td>Recommendations and consultation services to families, teachers and school administrators</td>
<td>161</td>
</tr>
<tr>
<td>Dissemination activities to promote awareness of network</td>
<td>63</td>
</tr>
<tr>
<td>Workshops and trainings (e.g., in-services) requested by schools, districts, families, and community agencies</td>
<td>19</td>
</tr>
<tr>
<td>Pre-service and in-service activities to graduate and under-graduate students</td>
<td>184</td>
</tr>
<tr>
<td>Updating USF FDLRS MDC website</td>
<td>2</td>
</tr>
<tr>
<td>Surveying districts to increase collaboration</td>
<td>1</td>
</tr>
</tbody>
</table>

The next section outlines significant activities and objectives obtained for USF FDLRS MDC that align with the schedule of deliverables included in the 2014-2015 RFA.

**Service Delivery Objective 1:** To provide 400 multidisciplinary diagnostic and evaluation activities for children and young adults identified as having or at risk of complex medical, learning/academic, emotional, and/or behavior problems.

The FDLRS MDCs do not supplant evaluation supports that should be provided by school districts. For each referred student, the interdisciplinary team reviews all current evaluations conducted by the school district and other community agencies. The evaluation plan, thus, conducts activities that supplement current evaluations and attempt to confirm or rule out alternate diagnostic explanations for presenting issues. Thus, the USF-FDLRS evaluative activities focus more on evaluations not typically conducted in school settings and/or collaborative activities that model evidence-based implementation of processes such as functional behavior assessments.
USF FDLRS MDC surpassed the goal set for this objective by providing 556 evaluation related activities. Activities in this objective include the following diagnostic and evaluation services: Cognitive evaluations (n = 25), Autism specific evaluations (i.e., ADOS and ADI-R, n = 39), functional behavior assessments including ABC observations and collaborative meetings with school personnel to gather information and develop hypotheses (FBAs; n = 65); family interviews (n = 104); self-reports (e.g., adaptive scales, behavior questionnaires; n = 126); educational assessments (n = 23); condition specific surveys (e.g., depression, anxiety; n = 10); speech and language (n = 31), neuropsychological/processing (n = 23); social/emotional screenings (n = 46); student observations (excluding observations for FBAs; n = 7), adaptive measures (n = 39); social/emotional surveys (n = 76); and 11 others (personality/projectives).

**Service Delivery Objective 2:** To provide a minimum of 80 recommendations and consultation services to families, teachers and school administrators.

USF FDLRS MDC offers coaching activities to assist educators and families in the implementation of recommended strategies. During 2014 - 2015, USF FDLRS MDC delivered 161 consultative activities. Consultation services include the following activities: providing coaching to schools/families to implement behavior interventions (n = 66); coaching/consulting to implement strategies linked to diagnostic evaluations (e.g., visual schedules; pivotal response training; n = 33); measuring implementation fidelity and debriefing (n = 17) and providing whole classroom behavior management consultations (n = 45).

**Service Delivery Objective 3:** To provide a minimum of 100 activities that recommend strategies and interventions based on diagnostic findings to families, teachers, and district personnel to improve outcomes for students.

After completing evaluation activities, strategies and interventions that would enhance academic success are provided to families and educators. During the 2014-2015 fiscal year, USF FDLRS MDC provided 200 activities related to recommending interventions and strategies for facilitating school success. The activities included in this area included the following: Meetings with families to review report results and recommendations (n = 44); meeting with teachers and schools (n = 30); meeting with both the families and the schools (n = 11); consultation with the family to provide recommendations in lieu of conducting a comprehensive evaluation (n = 35); consulting with the teacher/school to suggest strategies (n = 13); developing behavior intervention plans with educators based on the FBA hypothesis (n = 55); meeting with both schools and families to review behavior intervention plans (n = 6) and providing recommendations for students identified at risk based on behavioral screening results (n = 6).

**Service Delivery Objective 3:** To conduct a minimum of 3 activities to distribute information to ESE directors to individual school districts on available services.
USF surpassed this goal by conducting 5 activities that related to providing information to ESE directors. This was accomplished by individual meetings between the director and district special education directors.

**Service Delivery Objective 5:** To conduct a minimum of 4 activities intended to raise awareness of services provided through the network of FDLRS MDCs.

USF conducted 61 activities last year for the purpose of raising awareness of families, educators, and community providers of the services provided through our network. This was accomplished by disseminating brochures, presenting at meetings and other gatherings, including PPT slides that described the network and services during conference presentations, and meeting with FDLRS Associate Centers in the region.

**Training Objective 1:** To provide a minimum of 7 workshop/trainings as requested by schools, districts, families, and community agencies.

USF surpassed this goal by providing 19 requested workshop/trainings. This included conference presentations and professional development training series including two 10-week sessions of the TOOLS (Positive Behavior Change) classes. This also included requests from school districts and agencies to present specific topics related to behavioral interventions and autism specific assessments and evidence-based interventions.

**Training Objective 2:** To provide a minimum of 120 pre-service and in-service education and training for students, educators, health-care professionals, social service personnel and others.

USF surpassed this goal by providing 184 activities related to pre-service and in-service. This objective included structured group and individual supervision activities related to practicum students who are gaining experience in providing school-based evidence-based practices.

**Product Objective 1:** To provide a minimum of 1 activity to survey school districts in the USF FDLRS MDC MDC service area to identify targeted areas for increased collaboration between districts and the university FDLRS.

USF met this goal. A survey was developed and sent to 8 school districts in the USF FDLRS MDC geographic area. The districts surveyed included Charlotte, Desoto, Hillsborough, Manatee, Pasco, Pinellas, Polk, Sarasota. Responses were received from 4 of the school districts. Some districts were unaware of the MDS services. Hillsborough and Pasco, the two primary districts as sources for referrals, indicated high satisfaction with the clinic’s services. Responses from the districts indicated a high need in the area of behavioral interventions, specifically interventions that would assist the districts in reducing the number of restraint/seclusion incidents.
Product Objective 2: To provide one annual report for the previous fiscal year.

USF-FDLRS MDC met this goal by delivering the annual report for 2013-2014 (previous year) by 9/1/14 (report due date).

Product Objective 3: To review and update project-specific FDLRS University MDC website a minimum of 2 times.

USF reviewed and updated the project-specific website 2 times in the 2014-2015 year. The website updates included editing the people involved with the clinic and editing descriptions on the services we provide.

Satisfaction with services

After each service delivery and training event, teachers, parents, and other relevant persons are provided with a Satisfaction Survey to evaluate the quality and usefulness of the services and supports provided. Table 3 provides the overall results of service delivery satisfaction (e.g., evaluations, consultations, etc.) while Table 4 shows the satisfaction related to trainings, workshops, and other presentations.

Table 3. Satisfaction with Direct Services (N = 38)

<table>
<thead>
<tr>
<th>To what extent:</th>
<th>1=Not at all</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6=Greatly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you satisfied with the service?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>35 92%</td>
</tr>
<tr>
<td>Did the service meet its intended objectives above?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>35 92%</td>
</tr>
<tr>
<td>Would you recommend the service to others?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>36 95%</td>
</tr>
<tr>
<td>Would you seek the service again?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>36 95%</td>
</tr>
</tbody>
</table>

Table 4...
Table 4. Responses from Training Satisfaction Survey (N = 21)

<table>
<thead>
<tr>
<th>To what extent:</th>
<th>1=Not at all</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6=Greatly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the training increase your knowledge?</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>10 (48%)</td>
</tr>
<tr>
<td>Did the training meet its intended objectives above?</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>12 (57%)</td>
</tr>
<tr>
<td>Will you use what you learned from the training?</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>10 (48%)</td>
</tr>
<tr>
<td>Would you recommend the training to others?</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>6</td>
<td>9 (44%)</td>
</tr>
</tbody>
</table>

Results from the satisfaction surveys show that 100% of the individuals (~72%) receiving supports and services who filled out a survey were satisfied or highly satisfied. Training participant ratings showed that the majority (~72%) of participants were satisfied or greatly satisfied with the trainings.

Success Stories
The following section highlights several examples of success stories from clinic activities in the last year.

Data related to improved student outcomes

FBA Collaboration. The USF FDLRS MDC specializes in supporting students who experience serious problem behaviors. The model used by the clinic is based upon a process that was evaluated with a randomized controlled trial. This process, Prevent-Teach-Reinforce (PTR), is a collaborative model that has been shown to be significantly more effective in reducing problem behaviors and increasing social skills and academic engaged time than services as usual (Iovannone et al., 2009). PTR utilizes a four-step procedure aligned with the problem-solving process that many Florida schools use as the basis for their MTSS framework. The steps include (1) goal setting and progress monitoring; (2) assessment; (3) behavior intervention plan with coaching support; and (4) evaluation and next steps. Consensus building is part of every step with the teacher and/or team being the primary decision makers and the clinician facilitating the process. Progress monitoring is conducted using the Individualized Behavior Rating Scale Tool (IBRST; Iovannone et al., 2014), a direct behavior rating that teachers find to be feasible.
and sensitive for use in recording the occurrences of targeted behaviors. Interventions are selected by the teacher and/or team from a menu of evidence-based interventions with the USF MDC clinician ensuring that the interventions selected match the hypothesis. All strategies selected for implementation are task analyzed by asking guiding questions of the teacher or adults who will be the primary implementers so that the steps are feasible and acceptable. Each behavior intervention plan has a minimum of three interventions, one from each category. Prevent includes an intervention that modifies the contextual event in the hypothesis that makes it less relevant for problem behavior to occur, Teach includes a replacement behavior that the student can perform instead of the problem behavior that will get the same function (e.g., escape/obtain) and Reinforce includes a strategy to reinforce the replacement behavior as well as changing the way others respond to problem behaviors. Coaching and fidelity measurements are part of the process to ensure interventions are implemented as intended.

Table 5 below shows data for specific students participating in the PTR FBA/BIP process. For most of the students, problem and appropriate (replacement behavior) data were collected using the Individualized Behavior Rating Scale Tool (IBRST), a 5-point Likert direct-behavior rating scale. For problem behaviors, higher ratings indicate behaviors occurring at a high rate while lower numbers indicate problem behaviors occurring at criteria/goal levels. For appropriate behaviors, high ratings indicate that the behavior is occurring at desired levels and low ratings indicate behaviors not occurring. In addition, when teachers are in agreement, academic engaged time observations are conducted at baseline and post to determine whether students increase their behavioral engagement to task after the behavior plan is implemented. All teams are asked to collect data; however, not all teachers/teams provide their final data sheets upon request.

The data in Table 5 indicate that all students decreased problem behaviors and increased replacement behaviors. For the students in which academic engagement time was collected, engagement increased after intervention implementation. Further, all of the fidelity measures except for one (LS) indicated that interventions were implemented with high accuracy (e.g., >80%).

Table 5.

<table>
<thead>
<tr>
<th>Student</th>
<th>Baseline Problem Behavior</th>
<th>Post Problem Behavior</th>
<th>Baseline Appropriate Behavior</th>
<th>Post Appropriate Behavior</th>
<th>Baseline Academic Engaged Time</th>
<th>Post Academic Engaged Time</th>
<th>Implementation fidelity</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH</td>
<td>*n/a</td>
<td>*n/a</td>
<td>*86%</td>
<td>*92%</td>
<td>79%</td>
<td>93%</td>
<td>90%</td>
</tr>
<tr>
<td>MM</td>
<td>2.3</td>
<td>1.0</td>
<td>1.0</td>
<td>4.2</td>
<td>67%</td>
<td>92%</td>
<td>100%</td>
</tr>
<tr>
<td>JW</td>
<td>4.0</td>
<td>2.1</td>
<td>2.7</td>
<td>3.7</td>
<td>n/a</td>
<td>n/a</td>
<td>87%</td>
</tr>
<tr>
<td>BL</td>
<td>*48%</td>
<td>*4%</td>
<td>*26%</td>
<td>*64%</td>
<td>n/a</td>
<td>n/a</td>
<td>100%</td>
</tr>
<tr>
<td>SS</td>
<td>4.0</td>
<td>1.0</td>
<td>2.0</td>
<td>5.0</td>
<td>n/a</td>
<td>n/a</td>
<td>100%</td>
</tr>
<tr>
<td>AF</td>
<td>3.0</td>
<td>1.0</td>
<td>3.0</td>
<td>5.0</td>
<td>n/a</td>
<td>n/a</td>
<td>87%</td>
</tr>
<tr>
<td>DB</td>
<td>3.8</td>
<td>2.5</td>
<td>1.2</td>
<td>3.5</td>
<td>**3.4</td>
<td>**4.4</td>
<td>100%</td>
</tr>
<tr>
<td>LS</td>
<td>2.5</td>
<td>1.7</td>
<td>3.9</td>
<td>4.7</td>
<td>**3.0</td>
<td>**4.5</td>
<td>62%</td>
</tr>
</tbody>
</table>
*Note: Data represent frequency of behaviors during specified intervals.

**Note: Academic engagement data collected with the IBRST

Evaluation success stories

**Story 1**
A was referred to the clinic due to significant behavior problems. The school team requested a consultation with USF FDLRS MDC to assist with their FBA and BIP. Physical aggression was targeted as the problem behavior of concern to be reduced. Data were collected by frequency of aggressive incidents. Prior to the consultation, A engaged in an average of

**Story 2**
J was an elementary student whose targeted behavior of concern was “moving more quickly”. Baseline data showed that J took an average of 47 minutes to XXX. After intervention, J’s amount of time to go through a routine decreased to an average of 12 minutes.

**Story 3**
D received an evaluation from the clinic due to disengagement with his virtual school participation. Manifestations of anxiety resulted in D withdrawing from his neighborhood high school and enrolling in virtual school. At baseline, D had not logged into his virtual school at any time. Following the evaluation and recommendations, D began logging in more frequently and at the end of the school year, he logged in on average 80% of the time required. Further, D indicated that he planned to enroll again in his neighborhood school.

**Story 4**
M was a freshman in high school. Prior to his involvement with USF FDLRS MDC, he was failing 4 courses and was in danger of not earning his credits to advance to sophomore standing. After the evaluation and a recommendation for contingency contracting, M increased his grades and earned enough credits to become a sophomore.

**TOOLS Class:**

The clinic provides a community training to families, educators, and other professionals in basic behavioral principles that enhance positive relationships between adults and youth or positive behavior change. The class, TOOLS, provides a 10-week, 3 hour per week professional development offering in which participants learn behavioral principles and apply them in their settings (home or school). TOOLS that are taught include set expectations, reinforce, redirect, ignore junk behavior, staying close, and pivot. The training includes a pre- and post-assessment in which participants are presented with scenarios in which problem behaviors are role played by graduate students and trainers and participants identify the appropriate response to increase
appropriate behaviors while decreasing problem behaviors. The data below provide the pre/post-test results of the participants for the last TOOLS training. For all tools, a significant increase was seen in the post-test. In addition, graduate students from the applied behavior analysis program are assigned to families and educators to provide them with coaching support to implement the individual TOOLS in their specific settings.

**Figure 1: Pre-Post-Test Results of TOOLS training June – August 2014**

![Pre-Post-Test Results of TOOLS training](image)

**Qualitative Comments from Individuals:**

Guidance Counselor from school in Hillsborough: “Very impressed with the quick response time for a referral submitted.”

Satisfaction survey comment after recommendations made: “The service was very much worth the wait. The staff here was very respectful and sensitive to my needs.”

Satisfaction survey comment from teacher in Hillsborough related to behavioral consultation: “Please know that I appreciate Shelley Clarke and all that she did to help me, help a child. Will definitely refer to her as needed. Thank you.”

Satisfaction survey comment from administrator in Hillsborough: “Exceptional service for assessment and onsite student support and collaboration. Ms. Clarke maintained consistent contact via email and school visits to consult with staff and observe student. Ms. Clarke
contributed important insights and information to our problem-solving and FBA process. It was a pleasure working with her!"
References cited in the Annual Report:


Publications completed by USF FDLRS MDC staff 2014-2015

**Technical Reports for Florida Department of Education**


**Peer Reviewed Journal Publications**


**Journal Articles Submitted for Publication**


**Books and Book Chapters**

Presentations

INVITED


Submitted and Accepted Conference Presentations


Definitions
Consultation Services: Consultation services range in intensity from a one-hour meeting to more in-depth programming requiring approximately one hour a week per child over the course of the academic year. Examples of consultative services include:

- Providing technical assistance through participation in school intervention assistance teams in problem problem-solving to assess and monitor responses to intervention for children presenting with academic and behavioral problems at school;
- Coaching and mentoring through collaborative work with the individual teachers in their classrooms to support and maintain the competencies to identify and evaluate specific academic and behavioral problems for referred children and then to develop, implement, and monitor intervention plans to address these specific problems;
- Coaching and mentoring through collaboration with guidance counselors to support and maintain competencies to identify, evaluate, and address specific academic and behavioral concerns in children.

Evaluation Services: Multidisciplinary evaluations of children and adolescents presenting with academic, medical, emotional and/or behavioral problems. These evaluations provide summary information concerning cognitive development, educational and behavioral performance, as well as relevant recommendations.

The range of evaluations can include psychological evaluations of cognitive, academic, and/or psychosocial functioning; neuropsychological and developmental/behavioral evaluations for disorders such as Attention-Deficit/Hyperactivity Disorder and Autism Spectrum Disorders; speech and language evaluations; occupational therapy evaluations; audiological evaluations; family and individual history; adaptive behavior history. As part of the evaluation process, school visits are conducted to observe the child and to consult with the teachers, school administrators, and/or guidance counselors regarding the child's behavioral and academic performance.

Screening services: Administration of screening and progress monitoring instruments (e.g., Dynamic Indicators of Basic Early Literacy Skills [DIBELS], Peabody Picture Vocabulary Test [PPVT], FAIR) in facilitate identification and monitoring of students at risk of or experiencing learning, language, behavioral, and socio-emotional problems.

Intervention Services: Include the delivery of school-based individual and group counseling for children and adolescents who are experiencing behavioral and emotional difficulties and are identified and referred by participating school districts.

Presentation at training events. Presentations giving to an audience at an event arranged by others with the intention of dissemination information to promote awareness concerning effective practices, programs, and services.

Pre-service and in-service professional training. Pre-service training placements are provided for graduate and undergraduate students from various disciplines including
counseling, clinical psychology, school psychology, social work, pediatrics, and art and music therapy programs. Lectures, directed observations, and rotations through centers are available to undergraduate and graduate students to equip them to gain the skills needed to identify children who are at risk for learning and/or behavioral problems.

Provision of Training. Providing training where single or multiple recipients gain, strengthen, or maintain competencies that support effective practices, programs, and services.

Publication. Creation of a tangible resource that provides valuable analysis and information to support effective practices, programs, and services.

Referral for other services. Referral to appropriate community resources and services as needed to support the family.