RESEARCHBRIEF

Teaching Age Appropriate Learning Through Communication (TAALC)

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Communication is a basic need and right of all individuals (National Joint Committee for the Communication Needs of Persons with Severe Disabilities). Communication is necessary to participate in one's community and to also access academics. Education cannot occur without it. Kearns et al. (2011), in a study that spanned seven states and nearly 13,000 students, sought to gain insight into students' communicative abilities. They found that 61-79% of students across these states used symbolic language, such as verbal, signed, or written word, Braille, or a language-based augmentative or alternative communication (AAC) system. Between 13% and 26% of students used emerging symbolic language, such as understandable gestures, objects, and pictures. Finally, 7-17% of these students used pre-symbolic communication; they had no regularized modes of gestures or pictures, communicating only through cries, facial expressions, and changes in muscle tone.

Additionally, Kearns et al. (2011) found that only around 50% of students in the emerging or pre-symbolic levels in the seven state sample used AAC in their educational programs. Furthermore, they found little change across grade-bands regarding communicative competence. That is to say, students at a pre- or emerging-symbolic level of communication appeared to stay at that level, never progressing to symbolic communication.

The Project

If students with significant disabilities are to have access to the general curriculum throughout their education and other learning opportunities, they *must* be supported in developing a clear form of symbolic communication. To ensure this eventuality, there must be early, ongoing, and systematic collaborative intervention among the student's advocates. This includes speech/language pathologists, special and general educators, other related service personnel, the student's family, and, whenever possible, the student him or herself.

While attention to this issue is warranted for all students with significant disabilities, added urgency surrounds students who present the greatest challenge to teachers and other personnel

Given proper support, *all* students can develop a viable communication system — perhaps the most fundamental and vital educational outcome of all.

in terms of communication needs. As the research of Kearns et al. demonstrated, current trends indicate these students are not likely to progress in their communicative abilities. To address this, the Kentucky Department of Education funded a training grant in 2009 called the Low Incidence Initiative (LII), which sought to increase the communicative and academic competence of students with significant cognitive disabilities. Through this initiative, Teaching Age Appropriate Learning Through Communication (TAALC) emerged and has been in place for the past three years in school districts across Kentucky.

The LII-TAALC program works with teams to support their student's access to communication and academics. Beginning with an on-site training day, teams become familiar with the levels of communication (emerging, pre-symbolic, and symbolic) and the importance of communicative competence. Teams spend the second half of the training analyzing their particular student and creating a plan, utilizing videos of the student and planning tools introduced by LII-TAALC staff. Each student's team consists of individuals who interact with the

The 2011 Child Care Market Rate Study

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The Kentucky Child Care Market Rate study is conducted every two years by the Division of Child Care and the Kentucky Partnership for Early Childhood Services as part of the State Performance Plan (SPP). All licensed and certified child care facilities across the Commonwealth are surveyed in order to gather information on the current cost of child care and to determine the appropriateness of the current child care subsidy rate. In Kentucky, the child care subsidy program is known as CCAP, Child Care Assistance Program. This program allows parents, who might otherwise not be able to afford it, access to quality child care while they work, attend education programs, and/or participate in the Kentucky Temporary Assistance Project (K-TAP). All Kentucky families with incomes below poverty level are able to receive child care subsidy.

The Study

Distribution of the survey was a collaboration between the KY Division of Child Care, the Division of Regulated Child Care, and the Early Care and Education Training Records Information System. Using these three sources, a mailing list of child care facilities was created. The survey was first sent electronically to all child care facilities with an email address, followed by a paper mailing. Follow up reminders were sent at two, six, and eight weeks ultimately resulting in a 65% response rate.

Paper surveys were processed using electronic scanner and software. Responses were then combined with data from online surveys and saved to SPSS 17.0. Survey results were initially analyzed to understand statewide trends. Then data were disaggregated by (a) urban/rural designation and (b) region.

Analysis and Utilization of Data

Overall, statewide child care rates increased from 2009 to 2011. At the state level, licensed facilities had an average increase of $1.00 per day, while Certified Home care rates increased $0.71. Table 1 presents the rates by region, child care facility type, and length of care.

When data were disaggregated by region (East, West, Central), full-time rates increased slightly in each region, with the highest rates reported in the Central region, followed by the West, and finally the East. Rates in urban areas were consistently higher than rates in rural areas.

Additional analyses were conducted to investigate the percentage of facilities reporting participation in Kentucky's subsidy program. Although this percentage has declined almost 4% since 2007, the majority of facilities continue to accept state subsidy payments (87.1%). Statewide, full time rates continued higher in facilities not accepting subsidy ($0.67). This difference was most pronounced in the Central region, where the rates averaged $3.93 more than for facilities not accepting subsidy.

Rates were next compared to the current child care subsidy payments. Statewide, for full-time care for children under 4, only 28-30% of child care facilities charge the same or less than the available subsidy payment. For children 5 years and older, this percentage is 47.8%. Parents are expected to compensate for differences between the child care rate at a facility and the subsidy payment.

Additional analyses were conducted to investigate differences in those facilities participating in Kentucky's voluntary Quality Rating and Information System, STARS. Thirty-five percent of facilities who responded to the survey were STAR rated, slightly higher than the statewide rate of STARS participation (30%). Little difference was found between the rates of those who were and were not participating in STARS.

Table 1: Statewide Child Care Daily Rate by Region (75th Percentile)

Full-Time	Type I			Type II			Certified Home		
	0-24 mos.	2-4 yrs.	5+ yrs.	0-24 mos.	2-4 yrs.	5+ yrs.	0-24 mos.	2-4 yrs.	5+ yrs.
East	22.00	20.00	19.00	19.00	18.00	16.50	20.00	18.75	20.00
Central	31.60	28.00	24.00	25.50	25.00	23.75	25.00	25.00	21.75
West	23.00	22.00	19.00	20.00	20.00	19.50	20.00	19.00	18.00
Part-Time	Type I			Type II			Certified Home		
	0-24 mos.	2-4 yrs.	5+ yrs.	0-24 mos.	2-4 yrs.	5+ yrs.	0-24 mos.	2-4 yrs.	5+ yrs.
East	18.00	17.00	14.00	20.00	18.00	15.00	15.00	14.25	14.25
Central	30.00	25.00	20.00	20.88	20.00	28.50	20.00	20.00	23.50
West	20.50	16.55	16.50	19.00	20.75	20.00	15.75	15.00	14.00

The 2011 Kentucky Child Care Market Rate study also examined some new dimensions, including the number of children with disabilities and the number of minority children enrolled. Statewide, 32.8% of facilities reported serving at least 1 child with a disability. This percent was highest in licensed Type 1 facilities, with 37.2% reporting at least 1 child with a disability. Seventy-three percent of child care facilities reported serving children from a minority group. This percent was highest in licensed Type 1 facilities, where 80.3% reported serving at least 1 minority child.

For a copy of the final report go to www.kentuckypartnership.org/mrs. More information about child care subsidy is available through the Kentucky Division of Child Care http://chfs.ky.gov/dcbs/dcc.

HDI Student Research: Important Part of a UCEDD

Harold L. Kleinert, HDI Executive Director

As a part of our Spring 2012 HDI Research Brief, I would like to highlight some of the tremendous research done by our HDI trainees and research assistants over this past year. Below are just a few examples. Also note the lead article in this issue that features the work of another HDI Research Assistant and UK Master Degree Student in Communication Disorders, Rachel Hooey on our TAALC Project in collaboration with the College of Health Sciences.

Zach Goble, doctoral student in School Psychology and HDI Research Assistant on our SHEP project, has recently co-authored a manuscript in press for the *Journal of Public Policy in Intellectual Disabilities, Special Issue on Post-Secondary Education for People with Intellectual Disabilities.* The manuscript, "Creating Effective Mentoring Partnerships for Students with Intellectual Disabilities on Campus" was co-authored with SHEP Co-PI Dr. Missy Jones of Northern Kentucky University. It focuses on the importance of mentoring partnerships when considering the success of students with intellectual disabilities (ID). Their research showed that mentoring partnerships are not only helpful for the mentees (students with ID), but are also beneficial for the mentors (education majors). Jones and Goble found that reciprocal learning is an integral part of the mentor/mentee relationship, lending support that the presence of students with ID on campus enhances the learning environment for all. Their article was a qualitative study based in grounded theory that examined focus group transcripts, to identify how to increase the overall effectiveness of the individual mentoring partnerships, as well as the overall mentoring program on campus.

HDI Core Research Assistant and Clinical Psychology Doctoral Candidate **Sara Boyd**, who has co-authored a total of six manuscripts in refereed journals as a part of her work here at HDI, is presently working with HDI Executive Director, Dr. Harold Kleinert, on the development of an interdisciplinary, web-based module on counseling strategies for individuals with intellectual disabilities. Ms. Boyd and Dr. Kleinert intend to conduct an effectiveness study of the new module when it is completed this summer. The mental health needs of individuals with intellectual disabilities have often been overlooked, and there is a great need for training mental health professionals in addressing the needs of this population.

Alison Boswell, HDI Research Assistant and School Psychology Doctoral Student, has been working with Dr. Allison Layland, Associate Director of Mid-South Regional Resource Center (MSRRC), on an extensive review of the research literature on effective collaboration. This information will assist in developing a collaborative model for providing technical assistance focused on building capacity for education reform. The final manuscript summarizes critical elements of successful collaboration, including evidence-based practices for both implementation and evaluation of collaborative initiatives at the state and school district level. Effective collaboration provides the opportunity to tackle complex issues and improve outcomes for all students by bringing together stakeholders from both general and special education. MSRRC is able to make this research available both to the nine states we serve in our region, as well as nationally through the Regional Resource Center Program.

HDI Research Assistant and School Psychology Doctoral Student **Ashley Candelaria** has researched the health and exercise needs of individuals with disabilities, especially those living in rural areas. Specifically, she has examined the extent to which a group of 25 KY health professionals, educators, students, and advocates for individuals with disabilities, who attended a train the trainers workshop on the use of a nationally recognized health and wellness of curriculum *Health Matters Exercise and Nutrition Health Education Curriculum* (Marks, Sisirak, & Heller, 2010), have been able to implement aspects of that curriculum within their respective agencies. Eighteen of 25 participants (72%) responded, with most noting that they had shared the information with leaders of their respective organizations and were discussing the development of a health and wellness program within their own agency. Of immediate importance to this work is the recent decision of the Kentucky Division of Developmental and Intellectual Disabilities to use the Health Matters curriculum to help develop health and wellness programming for individuals with developmental disabilities on the KY Supports for Community Living Waiver. The health and wellness needs of individuals on KY's SCL Waiver is one of our state's key priorities for Waiver recipients.

Reference: Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities.* Baltimore: Paul Brooks.

student regularly, and are therefore essential in establishing a consistent and positive communicative environment. Depending on the student's needs, these individuals include general and special education teachers, para-educators, speech-language pathologists, occupational therapists, physical therapists, VI specialists, district-level personnel and administrators, and the student's family.

Following the training, teams implement their plans and begin collecting data regarding their student's communication patterns and progress. To support each team, LII-TAALC staff conduct bi-weekly coaching calls during which the student's team reports on progress, difficulties, and questions. In addition to talking through and trouble-shooting current goals for the student, LII-TAALC staff also assist teams in expanding upon or establishing new goals.

Results and Implications

To date, the LII-TAALC grant has worked with 28 student teams, training over 180 school and district staff. Data suggest positive changes for all students, regardless of the student's communication level at the start of the initiative. These changes reflect not only communication, but also student behavior and participation in classroom/academic activities. Preliminary

LII-TAALC results showed a 20% increase in receptive language (e.g., moving from the pre-symbolic level to emerging-symbolic) and 90% increase in level of expressive language.[1] Regarding AAC use, 100% of students with no ACC prior to the project obtained an AAC system during participation, and 67% of all students' AAC systems increased in complexity.

Qualitative analysis of survey results and coaching call notes also support the growth of teacher, SLP, and general team knowledge and skills. Furthermore, multiple teachers and SLPs have reported they have used what they have learned in their work with *other* students, thus demonstrating the generalization of knowledge and skills to benefit students with significant disabilities who were not grant participants. There has been no indication that "new" teachers and SLPs benefit from this type of intervention any more than experienced personnel. Indeed, preliminary data indicate that *all* who interact with students with significant disabilities stand to increase their knowledge and skills, and thereby improve the services they offer their students. Finally, these data strongly suggest that given proper support, all students can develop a viable communication system – perhaps the most fundamental and vital educational outcome of all.

[1] Receptive – 30% of students already had symbolic receptive communication, Expressive language – 10% began at symbolic communication.