

children's
institute

STRENGTHENING SOCIAL AND
EMOTIONAL HEALTH

STRENGTHENING SOCIAL AND
EMOTIONAL HEALTH



Chemung County School Readiness Project Prekindergarten Assessment Community Report 2010-2011 ELLCO Results

CRYSTAL TAYLOR, M.S.
GENEMARIE VAN WAGNER, B.S.
LAURI BRUGGER, M.S.
DIRK HIGHTOWER, PH.D.

SEPTEMBER 2011

**Chemung County School Readiness Project
Prekindergarten Assessment
Community Report
2010-2011 ELLCO Results**

CRYSTAL TAYLOR, M.S.
GENEMARIE VAN WAGNER, B.S.
LAURI BRUGGER, M.S.
DIRK HIGHTOWER, PH.D.

SEPTEMBER 2011

children's
institute

www.childrensinstitute.net

Table of Contents

Acknowledgements	i
Chemung County School Readiness Project – Prekindergarten Assessment	1
ELLCO – A Measure of Classroom Quality	2
Quality of Chemung County Preschool Classrooms	4
Classroom/Program Observation Process	5
Scores by Subscale and Area	7
Scores by Agency	8
Reliability of the ELLCO	15
Summary of Findings	17
Conclusions and Recommendations	17
Limitations	17

Acknowledgements

This report was made possible by the contributions of many partners including early education programs, foundations, and other agencies and interested partners. We thank the many individuals who give their time, hard work, ideas, and support to the Chemung County School Readiness Project Prekindergarten Program Assessment.

Contributing partners include the Chemung County School Readiness Project-Readiness Council and Lead Agencies, Chemung County Child Care Council, Elmira City School District, Elmira Heights School District, Economic Opportunity Program of Chemung County/Child Development Head Start, and Horseheads Central School District.

We especially wish to thank Donald Keddell for his sustained leadership in bringing so many organizations and individuals together towards a common vision of quality care and early education for children and families in Chemung County. We acknowledge the tremendous steps taken towards the introduction of a new measure of classroom program quality called the Early Language and Literacy Classroom Observation (ELLCO), the expansion of the Master Observer team, and the expanded role of the Chemung County ECERS-R / ELLCO Coordinator.

Special thanks are extended to the first year ELLCO Master Observers who diligently learned the ELLCO tool and whose work conducting the observations made the assessment of classroom programs possible. Several Master Observers are now trained on multiple measures and have served the project for five consecutive years. We acknowledge their tremendous commitment to satisfy the evaluation component of the project.

Particular thanks to Harriet Sweet, Chemung County ECERS-R / ELLCO Coordinator, for her steadfast and precise organization of program-specific information and management of Master Observers. With the introduction of the ELLCO, Harriet assumed a greater role in the overall implementation of the classroom observations.

Many thanks are extended to classroom teachers and administrators of area schools and early education and care centers who offered their classrooms as host sites for Master Observer field training.

We are excited about the future of the Chemung County School Readiness Project and its impact on young children's experiences. We look forward to continuing our partnership to promote informed decision making to enrich and improve early education and care programs and school performance.

Chemung County School Readiness Project – Prekindergarten Assessment

The Chemung County School Readiness Project – Prekindergarten Assessment completed its fifth year of assessing program quality in the Chemung County early education and care community. After four years of trend data using the ECERS-R, the Readiness Council chose to use a new classroom quality measure, the Early Language and Literacy Classroom Observation (ELLCO), a language and literacy focused tool. With the goal of focusing on a common set of early literacy standards, the ELLCO was used to observe 50 preschool classrooms throughout the county. Training for teachers in the use of the ELLCO was provided to support a sustainable system of program quality improvement using feedback from program observations.

These early childhood partners participated in the Chemung County School Readiness Project:

- ❖ Chemung County School Readiness Project-Readiness Council and Lead Agencies
- ❖ Chemung County Child Care Council
- ❖ Elmira City School District
- ❖ Elmira Heights School District
- ❖ Economic Opportunity Program of Chemung County/Child Development Head Start
- ❖ Horseheads Central School District

ELLCO – A Measure of Classroom Quality

Classroom quality is key to the provision of early education services. Independent, well-trained observers rated the quality of classrooms using the Early Language and Literacy Classroom Observation (ELLCO). The ELLCO is a 19-item measure that includes seven teacher interview questions. The ELLCO was designed to measure two subscales composed of two to three areas. Each area of the two subscales contains from three to five items that represent various elements of that area:

- ❖ General Classroom Environment
 - Classroom Structure
 - Organization of the classroom
 - Contents of the classroom
 - Classroom management
 - Personnel
 - Curriculum
 - Approaches to curriculum
 - Opportunities for child choice and initiative
 - Recognizing diversity in the classroom
- ❖ Language and Literacy
 - The Language Environment
 - Discourse climate
 - Opportunities for extended conversations
 - Efforts to build vocabulary
 - Phonological awareness
 - Books and Book Reading
 - Organization of the book area
 - Characteristics of books
 - Books for learning
 - Approaches to book reading
 - Quality of book reading
 - Print and Early Writing
 - Early writing environment
 - Support of children's writing
 - Environmental print

The classroom observation scores range from 1 to 5 and describe the characteristics of the classroom practice at five distinct levels, with the highest number indicating the most accomplished level of performance. A score of 1 is considered “deficient,” a score of 2 is “inadequate,” a score of 3 is meeting “basic” practice, a score of 4 is “strong,” and a score of 5 represents “exemplary” practice. Rather than assess classroom quality using a Classroom Observation Total score, the two subscales are rated separately.

After an observer is trained and meets inter-rater reliability of .85 for ELLCO scores with a master trainer, he or she is normally assigned five to eight classrooms. During a typical observation, an observer spends three to four hours observing the classroom, focusing on the 19 distinct items that make up the ELLCO. After the classroom observation, the observer typically spends an additional 15 minutes for a brief interview with the teacher to supplement the observation.

How are master observers trained?

In the first year of training, observers must participate in a fifteen-hour training program. In every subsequent year, four to five hours of additional training are required. Refinement of observation skills, inter-rater reliability, logistics of the observation process, observation guidelines, and protocol are reviewed annually.

Master Observers are trained to attain and maintain a minimum level of inter-rater reliability ($a/a+d > .80$). Master Observers are recruited and selected based on their years of experience in early childhood education (>10 years), skills in program observation, and their personal interest. With the introduction of the ELLCO in 2010-2011, ten recruits successfully completed ELLCO Master Observer Reliability Training. In November and December, two trainers from Children’s Institute met with observers in Chemung County for a full-day training at a local elementary school and returned again for two days of field training per pair of trainees, observing in local classroom programs. Field training was followed by in-depth debriefing sessions with the Master Trainer.

Expanded role of locally based ELLCO Coordinator

With the introduction of the ELLCO, the role of the Project Coordinator expanded to accommodate new demands of the evaluation project. In addition to coordinating the multiple processes within the new ELLCO evaluation component of the Readiness Project, the Chemung County Coordinator assumed greater responsibility including successful completion of ELLCO Master Observer Training, conducting five official ELLCO classroom observations, and the delivery of Introductory ELLCO Training to area teachers, directors and administrators.

Having a well-established Chemung County Coordinator in place for the past two years allowed for greater local leadership and ownership of evaluation processes. The ELLCO Coordinator worked closely with the Rochester based ELLCO Coordinator/Trainer to manage each phase of the process. The Coordinator communicated with school principals and agency directors to assure that program-specific information was current for the evaluation year. Local coordination

of area Master Observers in addition to teacher/director/administrator training was directly managed by the Coordinator. Assuming the bulk of responsibility for project coordination, the Coordinator continued to work in tandem with the Rochester Coordinator to execute the ELLCO evaluation component in Chemung County.

Quality of Chemung County Preschool Classrooms

How does the Chemung County formal Early Childhood Education (ECE) system compare with other ECE systems?

For comparison purposes, the mean Classroom Observation Total score for Chemung is compared with the ELLCO's Research Edition. At the time of publishing, there were no psychometric results on the updated ELLCO Pre-K. The Research Edition of the ELLCO contains 14 items instead of 19 and includes the Curriculum area in the Language and Literacy subscale rather than in the General Classroom Environment subscale, as the ELLCO Pre-K does. However, the ELLCO manual suggests that comparison of the Classroom Observation Total between the Research Edition and ELLCO Pre-K is appropriate.

The data reported for ELLCO's Research Edition is based on classrooms in lower income communities. Smith, Brady, and Anastasopoulos write, "All of these projects are concerned with the language and literacy development of children from lower income families and communities. Because of this, data reported here are based on centers and classrooms in lower income communities."¹

The mean of the Classroom Observation Total score for ELLCO's Research Edition (n=308) was 3.15. This year's 50 participating Chemung County classrooms had a mean Classroom Observation Total score of 3.54. The median score was 3.56.

¹ Smith, M.W., Brady, J.P., & Anastasopoulos, L. (2008) *User's Guide to the Early Language and Literacy Classroom Observation Pre-K Tool*. Massachusetts. Education Development Center, Inc.

Classroom/Program Observation Process

This year the observation process took place over five months. It began with the *Introductory ELLCO Training* in January, in which 35 providers, teachers, and directors participated. The two and a half hour training session included a brief introduction by the Chemung County ELLCO Coordinator. The coordinator framed the purpose and vision of the Chemung County School Readiness Project and the benefits of using a standardized measure to assess classroom program quality. Participants learned observation and scoring techniques and gained an understanding of the components of the ELLCO and the logistics of the classroom/program observation process. Classroom observations by master observers took place in February, March, April, and May.

The program observation process:

- ❖ The observer contacts the classroom teacher/provider to schedule the observation date.
- ❖ The program observation occurs (3 to 4 hours).
- ❖ The observer conducts a 10 - 15 minute interview with the teacher/provider immediately after the observation to supplement the observation.
- ❖ The observer completes the score sheet and submits it to Children's Institute for processing.
- ❖ The project coordinator reviews the score sheet for accuracy.
- ❖ The score sheet is checked again for accuracy by a data clerk, the information is entered into the database and a summary report is produced.
- ❖ Copies of the original score sheet and summary report are mailed directly to the teacher/provider.
- ❖ The teacher/provider reviews the information.
- ❖ If the teacher/provider disagrees with any item(s) in the report and wants to address this, he or she requests a Collaborative Review (outlined below).

Collaborative Review Process

After an observation is complete, the independent observer returns the completed score sheet to Children's Institute for processing. Copies of the score sheet and summary report are returned directly to the teacher with a cover letter that serves as a guide in reviewing the report. The letter includes an invitation to contact the project coordinator if the teacher feels a score does not accurately represent the program.

- ❖ If a teacher questions any item(s) and wishes to address this formally, the teacher contacts the project coordinator to obtain a Collaborative Review Request Form in which he or she outlines the details of the item(s) in question with additional supporting information.
- ❖ Upon receipt of the Collaborative Review Request, the project coordinator reviews the information provided by the teacher, consults with the independent Master Observer who completed the observation, and conducts a detailed re-examination of each quality

indicator score questioned. After consideration of these references, a determination is made whether any items should be scored differently.

- ❖ In a detailed letter to the teacher, the project coordinator formally addresses each questioned item and whether the item(s) score has been changed. A revised copy of the score sheet is returned with any applicable adjusted scores as well as a new summary report.
- ❖ The revised scores are entered into the database.
- ❖ If the teacher informs the project coordinator that he or she remains dissatisfied with the results of the process thus far, the coordinator arranges for a second independent observer to conduct a second complete observation and submit a formal report.

Summary of Results	ECERS-R 2009-10	ELLCO 2010-11
Number of reviews	1 out of 50	0 out of 50
Percent	2%	0%
Total number of items reviewed	6	0
Total number of items changed	5	0
Average change in overall score	0.4	0

Scores by Subscale and Area

Figure 1. Mean Scores by Subscale and Area

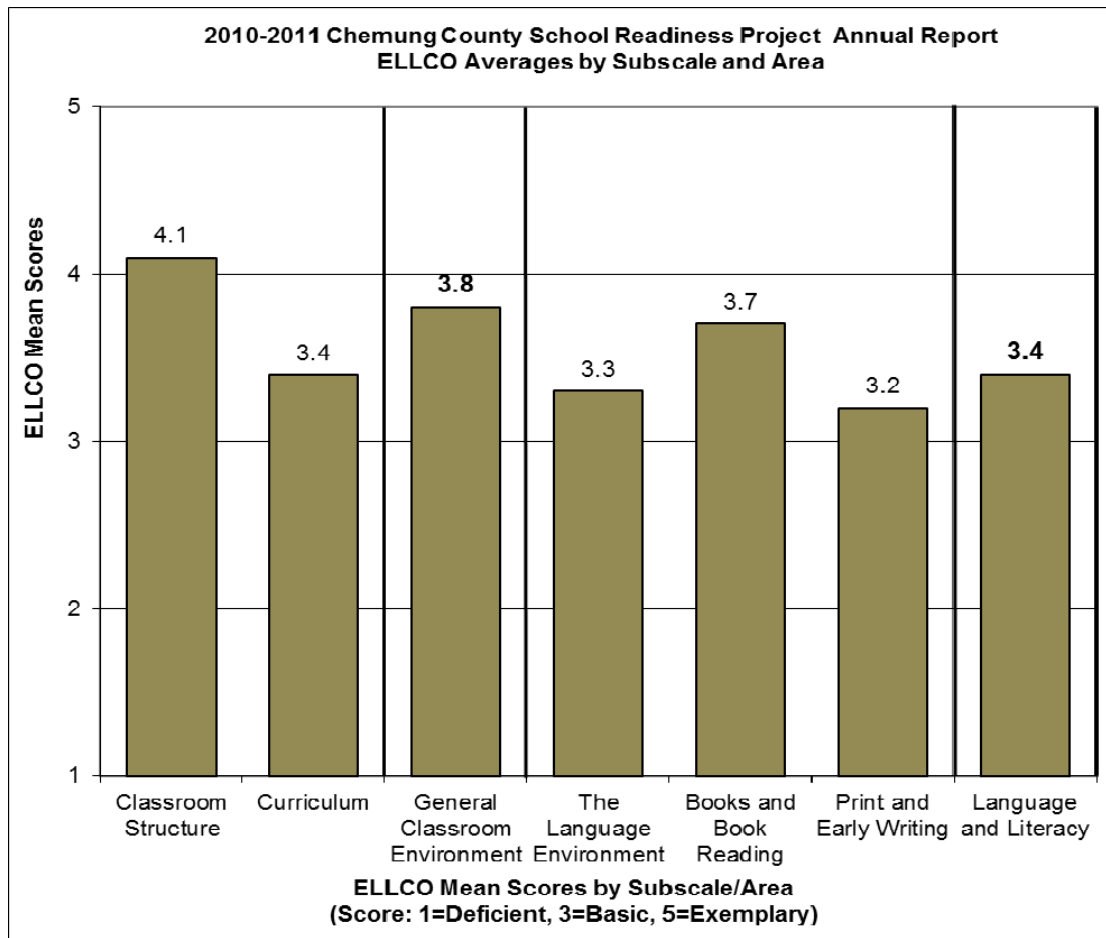


Table 1. Mean Scores by Subscale and Area

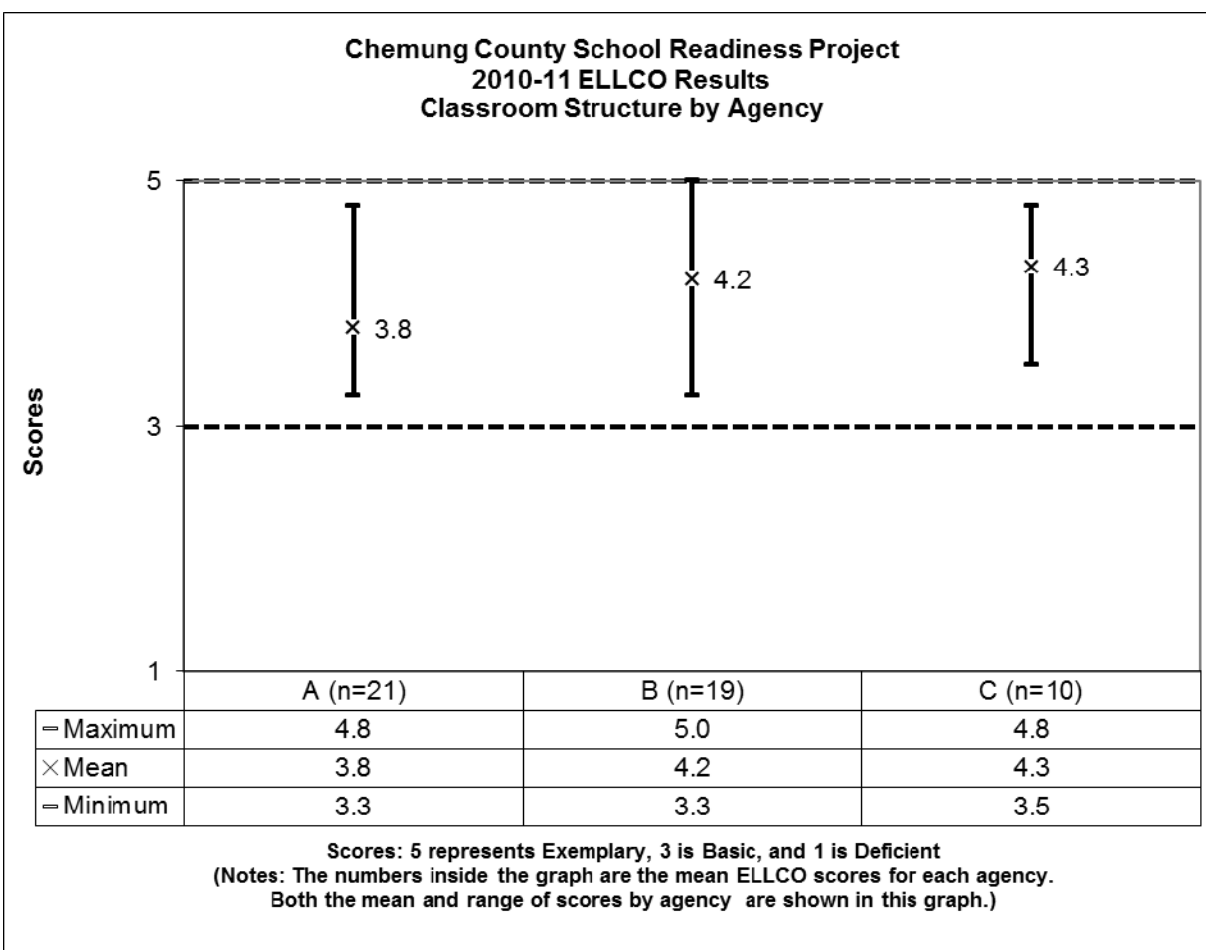
Chemung County 2010-11 ELLCO Scores by Subscale and Area (n=50)					
Subscale	Area	Mean	Std Dev	Minimum	Maximum
General Classroom Environment	Classroom Structure	4.06	0.47	3.25	5.00
	Curriculum	3.41	0.64	2.33	4.67
	Subscale	3.78	0.45	3.00	4.71
Language and Literacy	The Language Environment	3.27	0.81	1.50	5.00
	Books and Book Reading	3.69	0.66	2.00	5.00
	Print and Early Writing	3.15	0.90	1.00	5.00
	Subscale	3.41	0.67	1.67	4.92

Note: Scores have a potential range of 1 to 5, 5 being the highest.

Scores by Agency

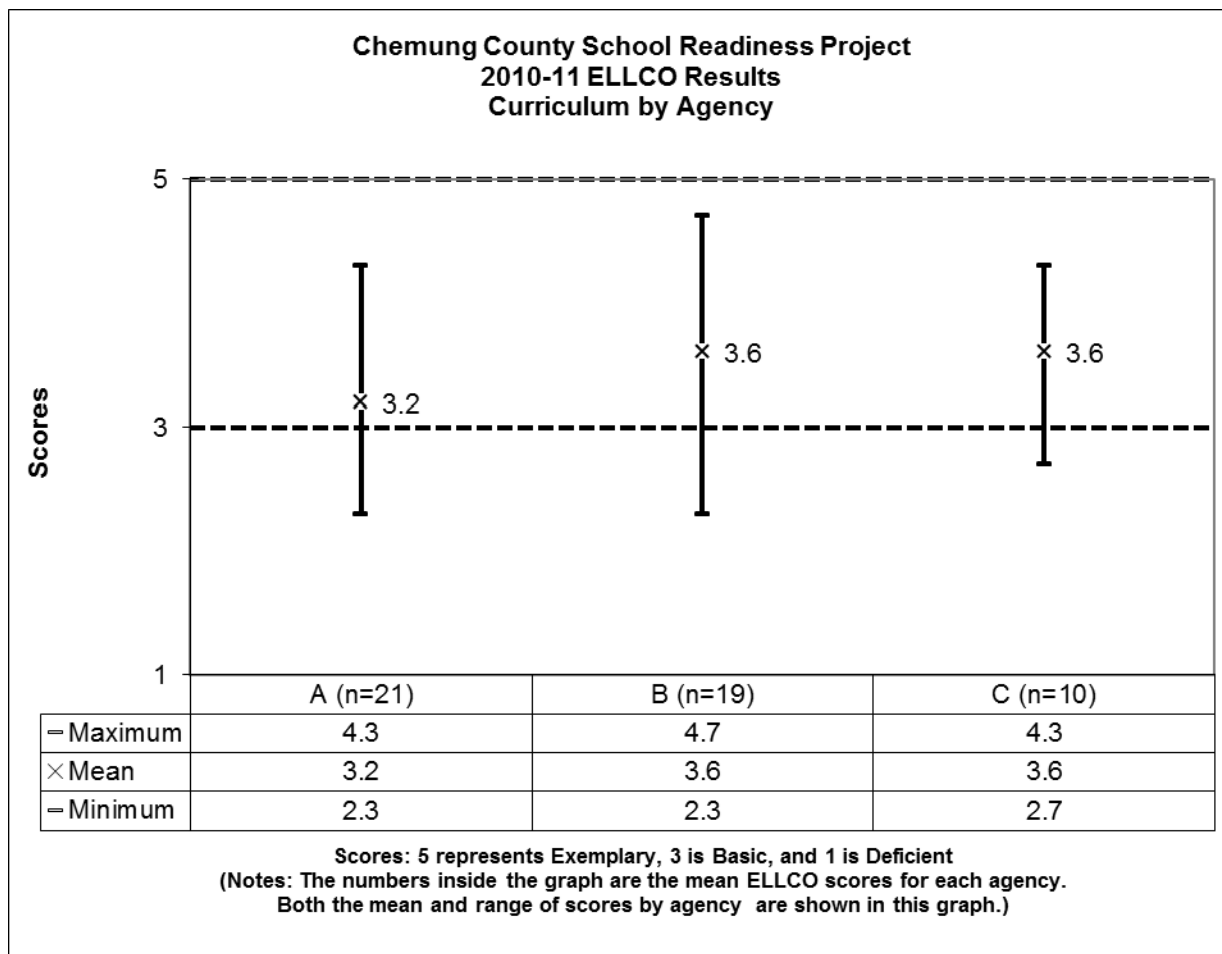
Figures 2 through 8 below show the results by Agency for each of the ELLCO areas and subscales.

Figure 2. Classroom Structure Area



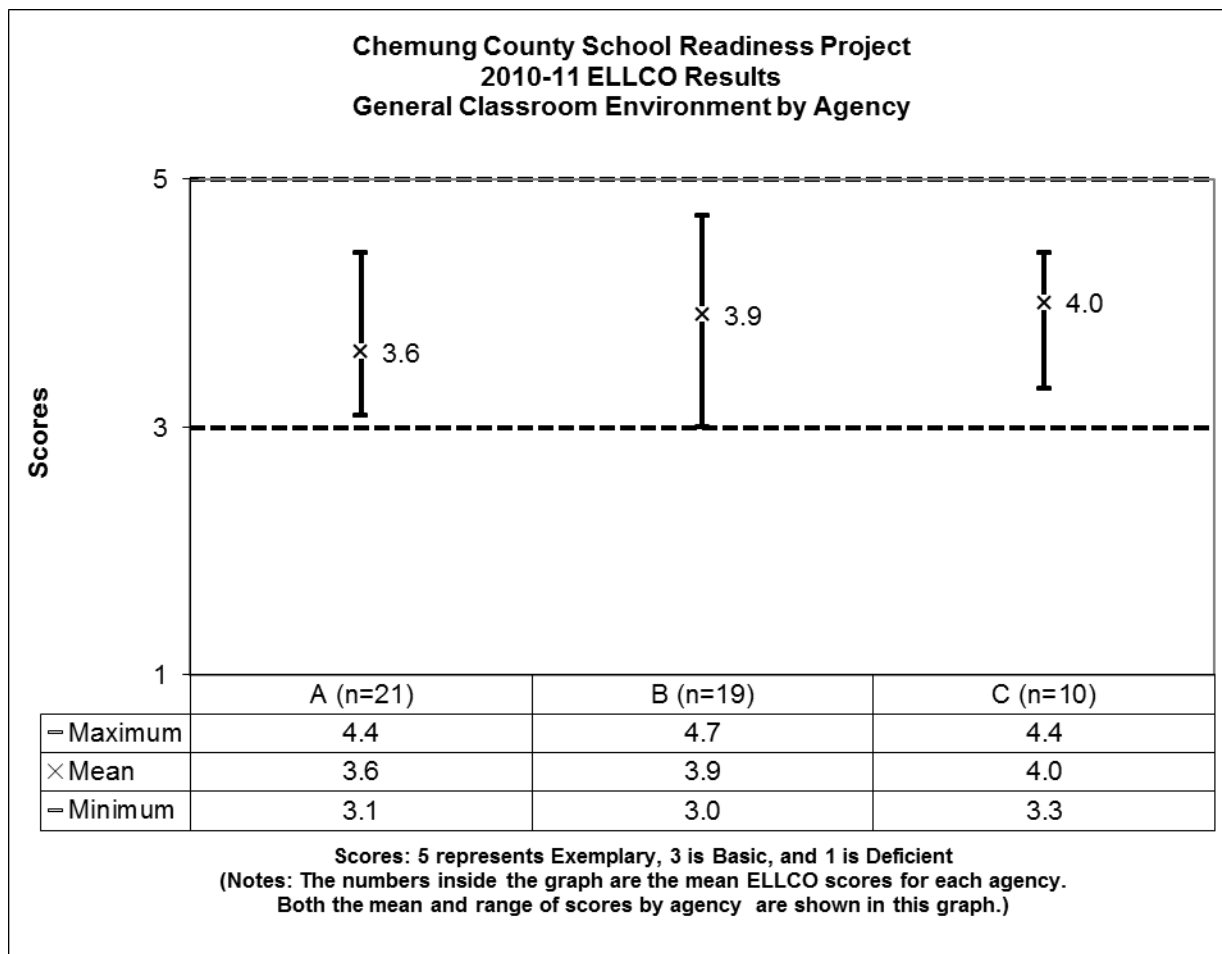
Classroom Structure – Number of Classrooms Within Score Range by Agency					
Score Range	A	B	C	Total	Percent
1-1.9	0	0	0	0	0.0%
2-2.9	0	0	0	0	0.0%
3-3.9	13	3	1	17	34.0%
4-4.9	8	15	9	32	64.0%
5.0	0	1	0	1	2.0%
Total	21	19	10	50	100.0%

Figure 3. Curriculum Area



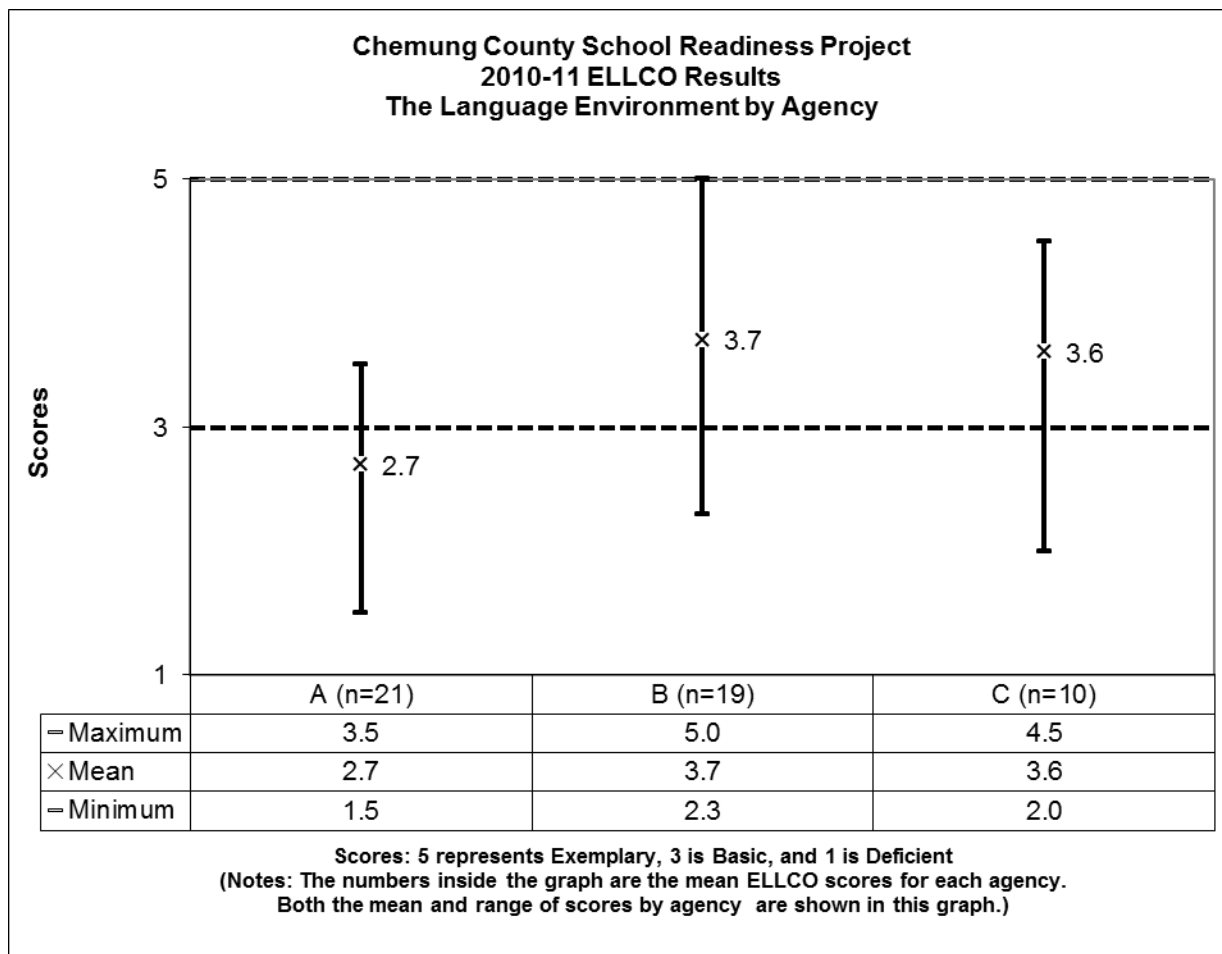
Curriculum – Number of Classrooms Within Score Range by Agency					
Score Range	A	B	C	Total	Percent
1-1.9	0	0	0	0	0.0%
2-2.9	7	3	1	11	22.0%
3-3.9	11	8	5	24	48.0%
4-4.9	3	8	4	15	30.0%
5.0	0	0	0	0	0.0%
Total	21	19	10	50	100.0%

Figure 4. General Classroom Environment Subscale



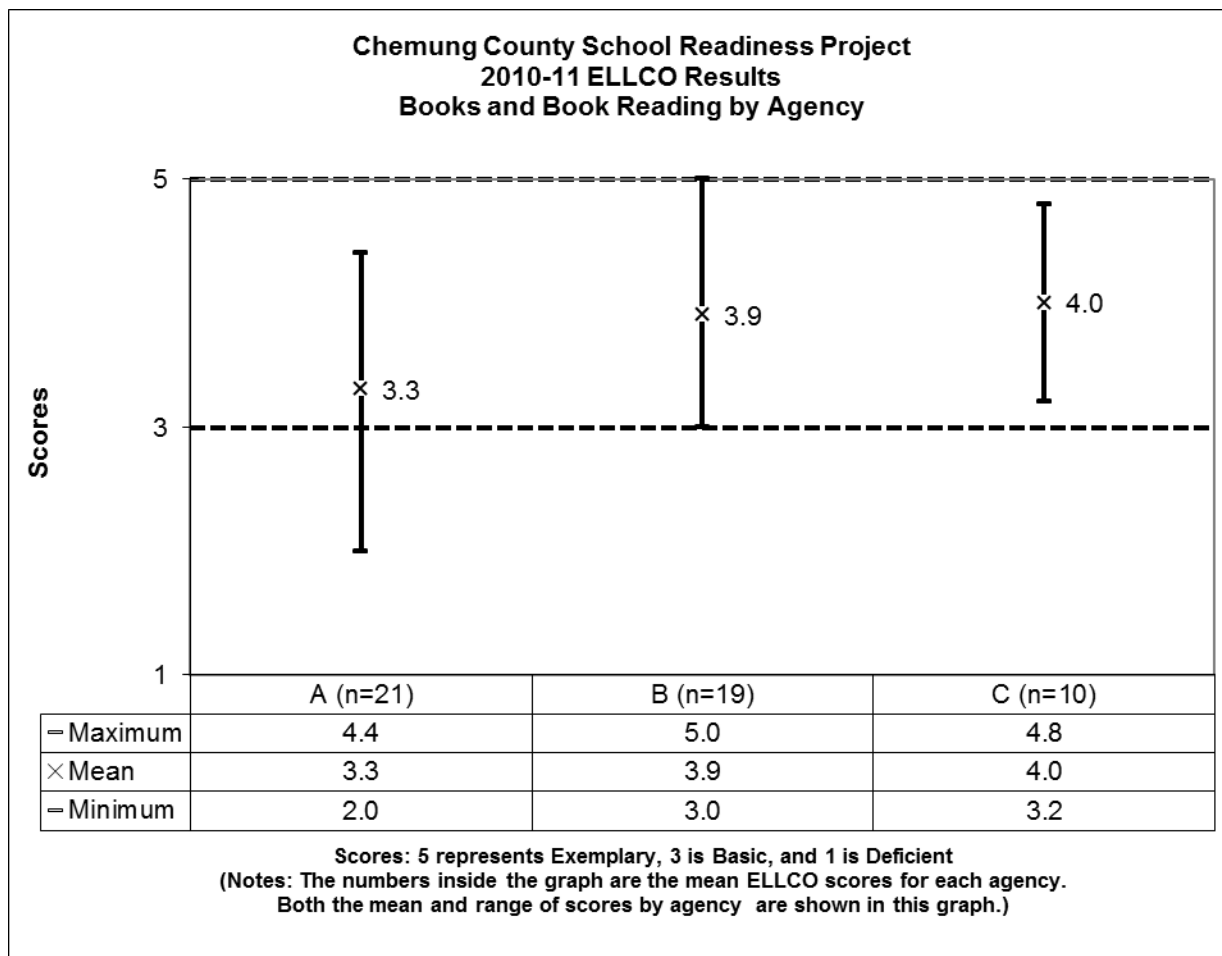
General Classroom Environment – Number of Classrooms Within Score Range by Agency					
Score Range	A	B	C	Total	Percent
1-1.9	0	0	0	0	0.0%
2-2.9	0	0	0	0	0.0%
3-3.9	17	8	5	30	60.0%
4-4.9	4	11	5	20	40.0%
5.0	0	0	0	0	0.0%
Total	21	19	10	50	100.0%

Figure 5. The Language Environment Area



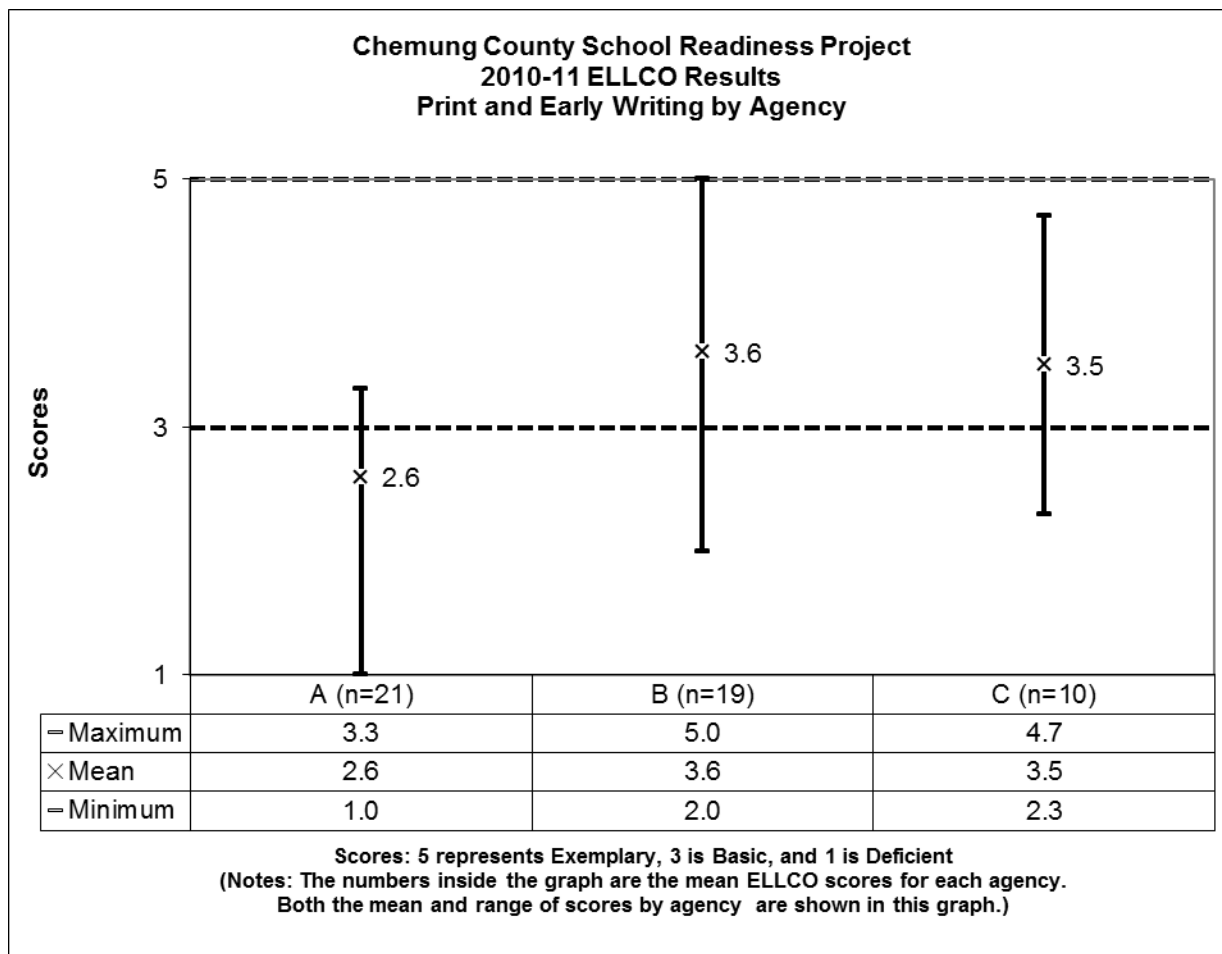
The Language Environment – Number of Classrooms Within Score Range by Agency					
Score Range	A	B	C	Total	Percent
1-1.9	1	0	0	1	2.0%
2-2.9	11	3	2	16	32.0%
3-3.9	9	9	2	20	40.0%
4-4.9	0	6	6	12	24.0%
5.0	0	1	0	1	2.0%
Total	21	19	10	50	100.0%

Figure 6. Books and Book Reading Area



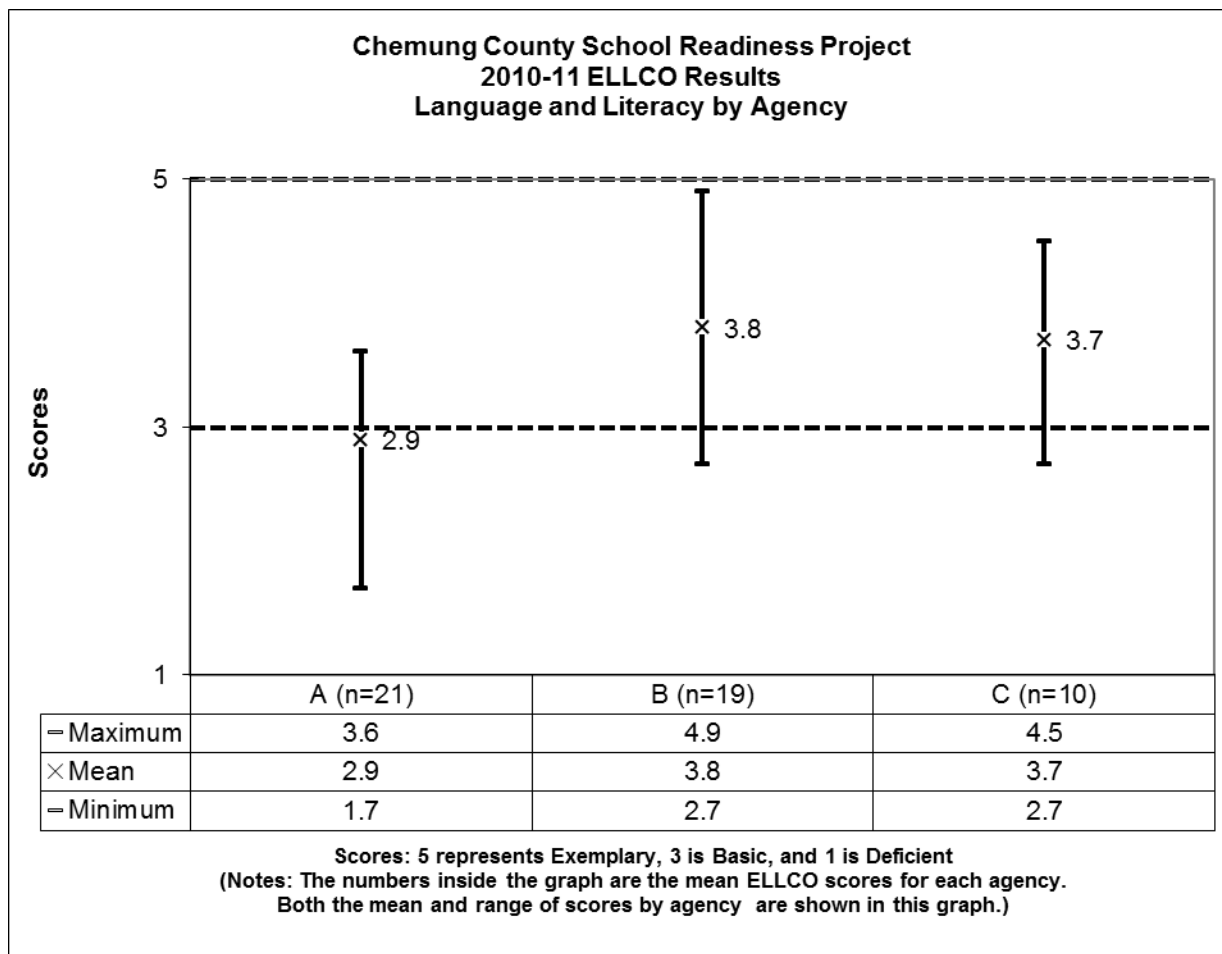
Books and Book Reading – Number of Classrooms Within Score Range by Agency					
Score Range	A	B	C	Total	Percent
1-1.9	0	0	0	0	0.0%
2-2.9	5	0	0	5	10.0%
3-3.9	12	9	5	26	52.0%
4-4.9	4	9	5	18	36.0%
5.0	0	1	0	1	2.0%
Total	21	19	10	50	100.0%

Figure 7. Print and Early Writing Area



Print and Early Writing – Number of Classrooms Within Score Range by Agency					
Score Range	A	B	C	Total	Percent
1-1.9	3	0	0	3	6.0%
2-2.9	10	3	3	16	32.0%
3-3.9	8	8	3	19	38.0%
4-4.9	0	6	4	10	20.0%
5.0	0	2	0	2	4.0%
Total	21	19	10	50	100.0%

Figure 8. Language and Literacy Subscale



Language and Literacy – Number of Classrooms Within Score Range by Agency					
Score Range	A	B	C	Total	Percent
1-1.9	1	0	0	1	2.0%
2-2.9	10	2	2	14	28.0%
3-3.9	10	8	3	21	42.0%
4-4.9	0	9	5	14	28.0%
5.0	0	0	0	0	0.0%
Total	21	19	10	50	100.0%

Reliability of the ELLCO

What does Cronbach's alpha mean?

Cronbach's alpha is a test of a measure's internal consistency. It is sometimes called a "scale reliability coefficient." For any assessment process, it is important to know whether the same set of questions measures a similar construct. Measures are declared to be reliable only when they provide reliable responses.

Cronbach's alpha assesses the internal reliability of a measure's answers. By measuring and reporting Cronbach alpha values, we have what is considered a numerical coefficient of reliability. The internal reliability (alpha) of the ELLCO for the 50 Chemung County observations this year was 0.91.

What is the Inter-Rater reliability of ELLCO?

As part of the ongoing effort to assure the accuracy of the measures used, many classrooms are observed by two observers so that we can calculate the level of agreement or inter-rater reliability among the cadre of observers.

The inter-rater reliability was $r=0.97$ when comparing total scores (n=10 dual observations). When comparing reliability results on an item-by-item basis, using (a/a+d; a=agreement and d=disagreement) the median inter-rater reliability was **0.84** for exact matches and **0.98** for differences of one point. *Keeping in mind that observers are trained to a 0.85 level of reliability for ELLCO scores with a master trainer; these results indicate a high level of reliability.*

Table 2 below shows the key results for the Chemung County inter-rater reliability for the ELLCO subscales and areas.

Table 2. Inter-Rater Reliability by Subscale and Area

2010-11 Chemung County School Readiness Project Inter-Rater Reliability (r) of ELLCO in Chemung County		
Subscale	Area	Chemung County Observers 2010-11 (n=10)
General Classroom Environment	Classroom Structure	0.89*
	Curriculum	0.76*
	Subscale	0.94*
Language and Literacy	The Language Environment	0.99*
	Books and Book Reading	0.93*
	Print and Early Writing	0.94*
	Subscale	0.97*
Note: * Signifies that these r values were significant at $p < .05$. (r) Signifies Pearson Correlation Coefficient values shown.		

Summary of Findings

For the ELLCO, the scores on the General Classroom Environment subscale and the two areas that make up the subscale, Classroom Structure and Curriculum, are strong for all agencies. Agencies A, B, and C obtained scores of 3.6, 3.9, and 4.0 respectively for this subscale.

The Language and Literacy subscale indicates the greatest area with opportunity for growth. Scores of 2.9, 3.8, and 3.7 were obtained by agencies A, B, and C. The Language Environment area and Print and Early Writing area in particular have the broadest range of scores, with agency A achieving a lower mean in these areas as compared to agencies B and C.

Conclusions and Recommendations

Overall, the first year findings of the ELLCO show broad variance within and among programs. The area of greatest need for all agencies is the Language and Literacy subscale, specifically The Language Environment and Print and Early Writing areas. Professional development activities may address this need with emphasis, for example, on facilitation of extended conversations and support of children's writing.

One recommendation is to explore specific activities and best practices on part of the provider that may lead to higher program quality outcomes. What program changes can be implemented? How can teachers be supported to improve specific areas of their program?

Another recommendation is to explore how teachers and administrators are using the data they receive. Results can drive and monitor areas of strength and areas of opportunity for growth.

Limitations

This evaluation has limitations that should be considered when interpreting the results presented in this report.

The program observations using the ELLCO were conducted by highly trained independent observers using a valid and reliable instrument. However, each program offering was observed only one time. While provisions were made through the Collaborative Review Process for any challenge to the accuracy of the ELLCO scores, it is possible that any single assessment might not be representative of a particular program offering.