

New Program: Master of Arts in Teaching Early Childhood Education

Academic Unit: Richard W. Riley College of Education
Winthrop University

Level: Master's degree

Proposed Date of Implementation: January 2009

IPEDS Code: 13.1210

Program: New

Justification

Purpose

The main purpose of the Master of Arts (MAT) in ECED is to prepare highly qualified teachers to enter PK-3 classrooms. The M.A.T. in ECED is developed to specifically address all National Association for the Education of Young Children (NAEYC) standards for initial certification programs. The program is also accelerated to better meet the needs of working adults as well as career-changers who desire to achieve a teaching certificate in the most time-efficient manner.

Program objectives

- 1) To develop well-prepared professionals who understand and use child development and learning principles to create great environments where all children can thrive (NAEYC, Standard 1).
- 2) To develop well-prepared professionals who understand, involve, and build close relationships with children, their families, and communities in the development and learning of children (NAEYC Standard 2).
- 3) To develop well-prepared professionals who understand and utilize appropriate assessment strategies to positively influence children's learning and development (NAEYC Standard 3).
- 4) To develop well-prepared professionals who build relationships with families, use developmentally appropriate teaching and learning strategies, have sound knowledge of content, and are able to integrate curriculum to promote development and learning (NAEYC Standard 4).
- 5) To develop well-prepared professionals who are guided by ethical and professional standards, who think critically and collaboratively, and are advocates for children, families and the profession of early childhood education (NAEYC Standard 5).

Need for program

The Richard W. Riley College of Education at Winthrop University routinely receives inquiries asking about an initial certification program in early childhood education (ECED) or elementary education (ELEM). In 2007, ECED was added to the critical shortage area list. Local school districts (Rock Hill and Lancaster, in particular) have indicated that they have a growing need for more ECED teachers. Likewise, Fort Mill and Clover districts are experiencing tremendous growth

in school populations with new schools being opened each year. There is also increased interest in full day four-year old programs throughout the region. The Center for Educator Recruitment, Retention and Advancement (CERRA) supply and demand surveys indicate a rising number of vacancies in early childhood public school classrooms across South Carolina. This shortage has been a trend for the past four years. All of these indicators justify the need for a new program aimed at initial certification in Early Childhood Education.

Centrality of program to mission

The printed mission statement of the University states “The university provides personalized and challenging undergraduate, graduate, and continuing professional education programs of national caliber within a context dedicated to public service to the state of South Carolina.” There is an exceedingly good fit between the development of a M.A.T. in ECED program and the mission of Winthrop University. As a comprehensive public university, Winthrop has supported education for the professions since its origins as a teachers’ college. Having a regional reputation of excellence in teacher education also enables Winthrop to broaden its offerings in graduate programs aimed at serving the needs of the state of South Carolina.

Relationship of the proposed program to existing programs at Winthrop University

Winthrop University has a long and rich history of teacher education. All of its programs are accredited by the National Council for Accreditation of Teacher Education (NCATE) and state approved. This new program will help to fill a void of initial certification at the graduate level for personnel desiring to teach in elementary schools.

Winthrop University currently has a M.A.T. that serves secondary and K-12 content areas. The new M.A.T in ECED will use the same conceptual framework, admission requirements and transitions as the current program. Winthrop also has a growing undergraduate program in ECED leading to initial certification. While the B.S. is increasing in size, the proposed new program will address a different population of potential teacher candidates (post graduates, career changers).

Similarities/differences of program with programs at other institutions

There are four M.A.T. ECED programs in the state: Columbia International University, College of Charleston, South Carolina State University, and University of South Carolina – Columbia. All are more than 70 miles from Winthrop and routinely serve different graduate student populations.

Enrollment

Admission Criteria

Admission criteria will mirror the current MAT in Secondary Education at Winthrop University. Specifically, the criteria for the M.A.T. in ECED are:

Admission Requirements. Graduate candidates who hold a baccalaureate degree from an accredited college or university. Graduate candidates who do not meet all undergraduate pre-requisite requirements will be required to complete additional course work prior to being admitted to the M.A.T. Admission requirements for graduate degree status include:

1. An Admission Index Score of eight. (The Admission Index Score is derived by a formula-based computation of the graduate candidate's undergraduate grade-point average (GPA) and a score on the General Test of the Graduate Record Examination (verbal and quantitative sections);
2. Submit an official GRE score of at least 400 on both the verbal and quantitative sections of the exam; and
3. Satisfactory completion of a writing sample as prescribed by the MAT program director.
4. Pre-requisite courses listed below are required for students who are entering the MAT in ECED.

6 hours of English composition, grammar, literature (i.e., writing or English composition, and English literature)

6 hours of math for classroom teachers (to include: basic number concepts, measurement, and geometry concepts for teachers: ex. MATH 291 & MATH 292)

7 hours in Natural Science, at least two of the following sciences must be represented: biological, physical, or earth science. At least one course must have a laboratory experience (i.e., biology, physics, physical science, geology, oceanography, astronomy)

6 hours in two areas in the Humanities and Arts (i.e., art, music, English literature, drama)

6 hours in Social Science (i.e., anthropology, sociology, political science, economics, geography)

3 hours in U.S. History or Government (i.e., history, political science)

Master of Arts in Teaching GPR and GRE Score Requirements. A graduate candidate must score at least 400 on the verbal portion of the GRE and at least 400 on the quantitative portion of the GRE and have a combined score on these portions of the GRE of at least 800. (Applicants who have already taken other tests such as the GMAT, LSAT, or MAT as part of admission requirements to other programs can submit those scores for consideration in lieu of the GRE. Preferred scores for admission will be 21 verbal and 27 quantitative on the GMAT, 380 on the MAT, and 144 on the LSAT.) Only when these criteria are met may an applicant use the tables below to determine the Admission Index Score. A graduate candidate must score at least 8 for admission to the MAT program. The Admission Index Score is a combination of one's derived scores in parts "a" and "b" below.

- a. Use the following table to determine the derived score for the GRE:

GRE Score	Derived Score	GRE Score	Derived Score
1500-1590	9	1000-1090	4
1400-1490	8	900-990	3
1300-1390	7	850-890	2
1200-1290	6	800-840	1
1100-1190	5	Below 800	0

- b. Use the following tables to determine the derived score for the undergraduate GPA. If the undergraduate degree was conferred five or fewer years ago, use the derived score in Table 1. If the undergraduate degree was received more than five years ago, Table 2 should be used.

Table 1 Five years ago or less	Derived Score	Table 2 More than 5 years
3.5 or above	9	3.25 or above
3.00-3.49	8	2.75-3.24
2.85-2.99	7	2.60-2.74
2.75-2.84	6	2.50-2.59
2.60-2.74	5	2.35-2.49
2.40-2.59	4	2.15-2.34
2.15-2.39	3	2.10-2.14
2.10-2.14	2	2.00-2.09
Less than 2.10	0	Less than 2.00

The a. derived score plus the b. derived score equals the Index Score.

Projected Total Enrollment

A cohort model will be employed totaling four, full-time terms to complete the program. Enrollment projections follow. Only spring term will have two cohorts enrolled at the same time. One cohort will be enrolled in their internship semester (9 hours) when a new cohort is admitted and begins the coursework (11 hours). Therefore, once a new cohort begins classes, spring terms will yield 400-422 CHP.

PROJECTED TOTAL ENROLLMENT						
YEAR	FALL		SPRING		SUMMER	
	Headcount	Credit Hours	Headcount	Credit Hours	Headcount	Credit Hours
2008-09			22	242	22	286
2009-10	22	286	44	422	22	286
2010-11	22	286	44	422	22	286
2011-12	22	286	44	422	22	286
2012-13	22	286	44	422	22	286

Winthrop expects the MAT in Early Childhood Education to have broad appeal for career-changers as well as recent college graduates who desire to pursue a career in education. The University frequently receives inquiries about an MAT in ECED and it is likely that acceptance into the program will be competitive and limited to 22 students. Cohorts the size of 22 teacher candidates will maximize resources of the College.

New Student Enrollment

Due to the cohort design of this new program (sequenced courses that are offered once a year), we estimate that the vast majority of graduate students who apply for this program will be new to

Winthrop. While it is conceivable that a current M.A.T. student (or two) might shift into this program when a new cohort is admitted each spring term, we do not believe it will be many.

ESTIMATED NEW ENROLLMENT						
YEAR	FALL		SPRING		SUMMER	
	Headcount	Credit Hours	Headcount	Credit Hours	Headcount	Credit Hours
2008-09	0	0	20	220	20	260
2009-10	20	220	40	400	20	260
2010-11	20	220	40	400	20	260
2011-12	20	220	40	400	20	260
2012-13	20	220	40	400	20	260

Curriculum

Required Program

	<i>Semester Hours</i>
EDUC 600 Teaching in a Democracy	3
EDUC 604 Educational Psychology and Assessment	3
EDUC 602 Technology for the 21 st Century classroom	2
SPED 610 Teaching Exceptional Learners in Inclusive Settings	3
EDUC 690 & 695 Internship and Capstone	9

Early Childhood Core courses

READ 510 Literature for Children	3
READ 600 Literacy Instruction and Assessment for Early Childhood Educators	3
ECED 631 Home-School-Community Collaboration	3
ECED 638 Creative Learning Experiences for Young Children	2
ECED 636 Early Childhood Development and Implications for Developmentally Appropriate Practices (DAP)	3
ECED 640 Teaching and Assessing Mathematics, Science and Social Studies in Early Childhood	8
PHED 603 Developmental Movement for Early Childhood Educators	2

Total **44**

Assessments

Key assignments throughout the MAT in ECED will become part of Winthrop University's Assessment System. Courses emphasizing content competence and instructional strategies/assessments (ECED 638, 640, PHED 603 and READ 600) will be part of the preparation prior to internship. The LEARN Strategy in SPED 610 will be a key assignment addressing diversity of learners. The Internship Work Sample (IWS), Long Range Plan and the final internship

evaluation represent culmination assessments of the teacher education program. Impact on student learning is key to the internship experience and is central to the IWS. All teacher candidates will participate in the State approved Winthrop University ADEPT plan as well.

New Course Descriptions

EDUC 604 (3) Educational Psychology and Assessment – An integrated study of development, learning, motivation and assessment with emphases on early childhood in the school setting, observational assessment, and individual differences such as gender, cultural background, and socioeconomic status. Introduces key assessment issues and topics, including the meaning of testing and assessment, cautions about using measurement techniques with young children, developmental screening, readiness testing, developmental assessment, and performance assessment.

READ 600 (3) Literacy Instruction and Assessment for Early Childhood Educators – This course provides understanding of: factors related to literacy; literacy competencies; procedures for developing literacy instruction; assessment measures for literacy; and applying principles learned in order to deliver appropriate instruction adjusted to the individual needs of students in PK-grade 3.

ECED 638 (2) Creative Learning Experiences for Young Children – This course is a study of concepts and content including: arts (sound, color, rhythm, movement) in the ECED curriculum; methods and materials for developing creativity; room arrangement; and relevant research. Observation and participation in two or more of the following settings: day care centers, public schools, community agencies, and the Macfeat Laboratory School are required. Students will observe and work with children of diverse ages and with children reflecting culturally and linguistically diverse family systems.

ECED 640 (8) Teaching and Assessing Mathematics, Science, and Social Studies in Early Childhood Education – This early childhood education methods course will focus on developmentally and age-appropriate strategies for teaching mathematics, science, and social studies. Candidates will apply strategies in field placement.

PHED 603 (2) Developmental Movement for Early Childhood Educators - This course will explore the role of movement in the cognitive, physical and social development of young children. Emphasis will be on developing an understanding of developmentally appropriate motor programming for young children and the importance of integrating movement activities in the classroom to facilitate development across all domains of learning.

Faculty

Staff (number and rank)	Highest Degree Earned	Field of Study	Teaching in Field (Yes or No)
Professor #1	PhD	Educational Research	Yes
Professor #2	PhD	Educational Psychology/Assessment	Yes
Assoc. Professor # 1	PhD	Early Childhood Education	Yes
Assoc. Professor #2	EdD	Special Education	Yes
Assoc. Professor #3	PhD	Social Foundations	Yes
Asst. Professor #1	PhD	Early Childhood Education	Yes
Asst. Professor #2	PhD	Math/Science Education	Yes
Asst. Professor #3	PhD	Math/Science Education	Yes
Asst. Professor #4	EdD	Literacy	Yes
Asst. Professor #5	Vacant (to be filled fall 2008)	Social Studies Education	Yes
Asst/Assoc.	New position	ECED	Yes

The new faculty member (to be hired for the 2009-10 AY) will have an ECED doctorate with appropriate supervisory skills.

Current faculty will be part of the teaching and supervision of interns. Fortunately, current ELEM content (math and science) instructors are also early childhood certified and can assist in the teaching of ECED 640 as well as assist with some M.A.T. ECED intern supervision. Since the undergraduate elementary education program is experiencing some decrease in enrollment, an additional adjunct may not be necessary for ELEM undergraduate intern supervision if we move current elementary education faculty to the M.A.T. ECED intern supervision.

Winthrop University's definition of FTE is a twelve credit hour load per semester.

UNIT ADMINISTRATION/FACULTY/STAFF SUPPORT

YEAR	NEW		EXISTING		TOTAL	
	Headcount	FTE	Headcount	FTE	Headcount	FTE

Administration

2008-09	0	0	1	.10	1	.10
2009-10	0	0	1	.05	1	.05
2010-11	0	0	1	.05	1	.05
2011-12	0	0	1	.05	1	.05
2012-13	0	0	1	.05	1	.05

Faculty

2008-09	0	0	8	2	8	2
2009-10	1	1	9	2.5	10	3.5
2010-11	0	0	10	3.5	10	3.5
2011-12	0	0	10	3.5	10	3.5
2012-13	0	0	10	3.5	10	3.5

Staff

2008-09	0	0	2	.10	2	.10
2009-10	0	0	2	.05	2	.05
2010-11	0	0	2	.05	2	.05
2011-12	0	0	2	.05	2	.05
2012-13	0	0	2	.05	2	.05

Physical Plant

This new program will not require the creation of additional space to Winthrop's facilities.

Equipment

There are no new equipment needs anticipated for this program. The normal consumables and teaching aids will be required as in any early childhood methods and materials classes.

Library Resources

The Ida Jane Dacus Library is an integral part of the university's instructional program. The primary goal of the Winthrop University Library is to support the instructional and research activities of the Winthrop University academic community. The library also serves the community at large through interlibrary cooperative agreements and limited public access to the collection.

As of July 1, 2007, the General Collection consists of over 424,896 volumes and a piece count of over 1,890,863.

Quantitative Comparison of Library Holdings

Peer Institutions:

- **Radford University** offers students the opportunity to receive an undergraduate degree (B.S.) in Early Childhood Education (pre-kindergarten – grade 3) and Early childhood Special Education (birth – age 5, all disabilities) as well as a graduate degree (M.S.) in early childhood Special Education (birth – age 5) in the School of Teacher Education and Leadership. Fall 2006 enrollment for the institution: 9,952
- **Furman** teacher education program offers students the opportunity to receive as Master of Arts degree, with a concentration in Early Childhood Education, for Certified Teachers and a Master of Arts degree, with a concentration in Early Childhood Education, for Teacher to Teacher Participants. Early Childhood certification, grades PreK-3, is added on at the graduate level to elementary certification. Courses in this concentration focus on the behavior of young children, and on pedagogical strategies used with infants and in early elementary classrooms. Fall 2006 enrollment for the institution: 3,007.
- **College of Charleston** offers students the opportunity to receive a Bachelor of Science degree in Early Childhood Education as well as a Master of Arts in Teaching: Early childhood Education (Grades PK-3) degree in the Department of Early childhood and Elementary Education. Fall 2006 enrollment for the institution: 11,218.
- **Coastal Carolina** offers students the opportunity to receive a Bachelor's degree in Early Childhood Education (PreK-3) in the Spadoni College of Education. Fall 2006 enrollment: for the institution: 8,049.
- **Winthrop University** offers students the opportunity to receive a Bachelor of Science degree in Early Childhood Education in the Richard W. Riley College of Education. Fall 2006 enrollment for the institution: 6,292.

An Early Childhood Education program in South Carolina prepares students to meet the educational requirements for South Carolina certification in PK-Grade 3. The goals of all programs should be to prepare highly effective teachers to meet the educational needs of children and youth. The library catalogs of the peer institutions were searched to ascertain the approximate number of cataloged titles within the selected Library of Congress subject headings. In comparing Winthrop to its peers, and especially to the institution with degrees in Early Childhood Education the title count is comparable.

	Radford	Furman	College of Charleston	Coastal Carolina	Winthrop University
Day Care Centers	46	6	23	20	27
Early Childhood Education	87	21	136	38	33
Early Childhood Special Education	2	1	3	0	1
Education, Preschool	165	38	127	72	140
Education, Primary	46	18	51	21	32
Kindergarten	28	17	14	8	32
Montessori Method of Education	27	16	37	25	29
Nursery Schools	29	20	15	10	35
Play Groups	1	0	1	2	1
Preschool Tests	2	1	1	0	1
Readiness for School	23	9	20	7	12

Periodicals/Electronic journals

Dacus Library receives over 1,459 different print subscriptions to general magazines, journals for specific topics and national and international newspapers. The e-journal collection has approximately 25,676 unique titles indexed in a total of 33 different databases. Databases appropriate for Early Childhood Education are Academic Search Premier, Academic OneFile, ERIC, PsycINFO, PSCYARTICLES, Physical Education Index, SPORTDiscus, LexisNexis Academic, SocINDEX with Full Text, Oxford English Dictionary and JSTOR. The library provides access to its holdings via the World Wide Web at (<http://www.winthrop.edu/dacus>).

Current Periodicals in Print

American journal on mental retardation
 Behavioral disorders
 Bulletin of the Center for Children's Books
 Educational Administration Quarterly: EAO
 Education and training in Developmental Disabilities
 Educational Horizons
 Education Update
 Emphasis
 The Gifted Child Quarterly
 Harvard Educational Review
 Hispanic Outlook in Higher Education
 Journal of Aesthetic Education
 Journal of child Language
 Journal of College Student Development
 Journal of Education Finance

Journal of Early Intervention
Journal of Family and Consumer Sciences
Journal of Literacy Research
Journal of the First-Year Experience & Students in Transition
Journal of Curriculum Studies
Middle School Journal
NSTA Report
Our Children
Reading horizons
Rethinking schools
School business affairs
Teaching Tolerance
Volta Voices

Students have access to electronic Journals via the online catalog. The following childhood education journals are available online.

Childhood Education 01/01/1993 to present

Early childhood Education Journal 03/01/1997 to 1 year ago and 2000 to present

Information technology in Childhood Education annual 01/01/1999 to 01/01/2004

Journal of Research in Childhood Education 03/22/1999 to present

Topics in Early Childhood Special Education 03/01/1990 to present and 12/22/1998 to present

Quantitative estimate of acquisitions needed

For the past three years, the library's expenditures for all areas supporting Early Childhood Education are outlined below.

	fy2004-2005	fy2005-2006	fy2006-2007
Books			
Curriculum & Instruction	\$6,235.26	\$9,254.18	\$7,874.85
Counseling & Leadership*	\$1,898.54	\$0.00	\$0.00
Center for Pedagogy	\$4,895.97	\$6,601.92	\$7,353.98
Psychology	\$7,638.42	\$7,401.11	\$7,062.64
Total books:	\$20,668.19	\$23,257.21	\$22,291.47
Video / sound			
Curriculum & Instruction	\$0.00	\$34.57	\$0.00
Counseling & Leadership*	\$472.05	\$0.00	\$0.00
Center for Pedagogy	\$0.00	\$337.21	\$262.84
Psychology	\$1,375.51	\$1,132.73	\$2,595.44
Total videos:	\$1,847.56	\$1,504.51	\$2,858.28
Serials			
Curriculum & Instruction	\$21,681.55	\$13,252.87	\$13,821.45

Counseling & Leadership*	\$3,728.98	\$1,166.66	\$2,664.55
Center for Pedagogy	\$4,232.04	\$4,239.53	\$5,239.86
Psychology	\$33,456.24	\$33,093.62	\$35,968.69
Total serials:	\$63,098.81	\$51,752.68	\$57,694.55
Total expenditures:	\$85,614.56	\$76,514.40	\$82,844.30

*Counseling & Leadership was combined with Curriculum & Instruction on July 1, 2005. Journals were moved to Curriculum & Instruction in July 2007.

**Titles Added in the Area of Education
2004/2005-2006/2007**

Center for Pedagogy			
2004/2005	2005/2006	2006/2007	Total (3 years)
116	174	180	470
Curriculum & Instruction			
354	288	325	967
Counseling & Leadership			
59	2	0	61
Psychology			
185	139	126	450
Total Tiles Added			1,948

When the Master's degree program is approved, the Library will seek and allocate additional funding to purchase resources not currently available in the collection. Based on past spending patterns of the library, the monographs budget (Books & videos) for subject areas supporting Early Childhood Education will average an 8% increase each year and the periodicals budget will average a 13% increase. According to *The Bowker Annual Library and Book Trade Almanac 52nd* edition, and using the subject areas appropriate for Childhood Education, the price for books for 2006 was Education (\$53.52), Psychology (\$59.00), and Sports/Physical Education (\$40.39). Calculating an average price per volume of \$50.97 for monographic titles published in the area of Childhood Education.

Proposed monograph budget for new titles for an additional three years for all subject areas supporting Early Childhood Education (considering 8% annual inflation for monograph prices):
 Year 1 = 2008 = \$38,666.16 (inflation by \$2,864.16)
 Year 2 = 2009 = \$41,759.45 (inflation by \$3,093.29)
 Year 3 = 2010 = \$45,100.20 (inflation by \$3,340.75)

Accreditation, approval, Licensure, or Certification

The M.A.T. in ECED will undergo the same review and accreditation procedures as any other initial teacher education program at Winthrop University. This program summary will be forwarded to the State Department of Education according to the *Timetable for Public Professional Education Unit Program Proposals 2007-08*.

Graduates of the proposed program will take all state mandated examinations (Praxis II). Candidates have to pass the ECED content Praxis tests before they are allowed to begin their internship semester. Candidates are encouraged to take the PLT during the internship. The national specialty association is the National Association for the Education of Young Children (NAEYC). Once the program is eligible for review, it will be sent to NAEYC for external review. This program has been designed to meet the specific standards of NAEYC: content methods and assessment (reading/language arts, math, science, and social studies); health and safety of child care settings/classrooms; child care administration; creative arts; curriculum integration; and child growth and development and working with families and their communities. All South Carolina state standards (ADEPT, etc.) are incorporated into the internship and capstone experiences of the program.

Articulation

Policy at Winthrop University allows transfer of nine graduate hours (up to 12 hours with dean's approval) from another institution into a graduate program. While some of the program's courses are uniquely developed (such as the eight hour integrated methods with field experience), there are foundational courses (Educational Psychology and Assessment, Teaching in a Democracy, Educational Technology) that we would readily accept from other institutions. Children's literature is another potential transfer course that other institutions likely have at the graduate level.

Estimated New Costs

Winthrop will utilize the current Early Childhood, Foundational, Reading, Special Education, and Elementary faculty in the first two terms. A new faculty FTE will be required in Fall 2009 when the early childhood methods classes and intern supervision occur. Restricting the program to a cohort model will allow for the efficient and effective program management. There would be 40 to 44 graduate candidates each spring, but then only 20-22 every other term. Salary plus fringes for one new faculty FTE are estimated at \$67,000. Supervision of interns each spring may require our hiring part time supervisors, @ \$350 per intern, for a total of \$7,000 plus travel, each spring. No additional administrative or staff resources are expected to be required. Gearing up for the first year (library, supplies, etc.) of the program will require some funding, but then maintenance costs after the initial expenditures..

ESTIMATED NEW COSTS BY YEAR						
CATEGORY	1st	2nd	3rd	4th	5th	TOTALS
Administration	0	0	0	0	0	0
Faculty Salaries	67,000	69,000	71,000	73,213	75,400	355,613
Graduate Assts.	0	0	0	0	0	0
Clerical/Support	0	0	0	0	0	0
Supplies/ Mat	2,000	1,000	1,000	1,000	1,000	6,000
Library	6,000	3,000	3,000	3,000	3,000	18,000
Printing/Copying	3,000	1,000	1,000	1,000	1,000	7,000
Intern supervision & travel	9,000	9,000	9,000	9,000	9,000	45,000
TOTALS	87,000	83,000	85,000	87,213	89,400	431,613
SOURCES OF FINANCING BY YEAR						
Estimated FTE	266,672	488,899	488,899	488,889	488,899	2,222,267
Tuition Funding	210,614	397,373	408,619	419,866	431,112	1,867,584
Other State Fund	0	0	0	0	0	0
Reallocation	0	0	0	0	0	0
Federal Funding	0	0	0	0	0	0
Other Funding	0	0	0	0	0	0
TOTALS	477,286	886,272	897,518	907,765	920,011	4,089,852