Concordia University, Nebraska

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Head of Teacher Education:

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Folio review for:

Natural Science – 7-12, Physical Science – 7-12

Biology – 7-12, Chemistry – 7-12, Physics 7-12

Program type: Initial Teaching Certification

Bachelor of Science in Education

NDE and NCATE accreditation - 2005

Initial Review

Concordia University, Nebraska – Biology, Chemistry, Physics, Natural Science, Physical Science

Section 1 – Contextual Information

Mission and Vision of the Institution

Concordia University, owned and operated by the Lutheran Church—Missouri Synod, is a coeducational institution of higher learning committed to the Christian growth of its students. **Concordia University, Nebraska is an excellent academic and Christ-centered community equipping men and women for lives of learning, service and leadership in the church and world.**

By 2015 Concordia University, Nebraska will grow and expand its influence to diverse populations by fostering collaboration and adapting to our changing environment while remaining faithful to our mission of excellent Christian education.

Degree programs in professional education and the liberal arts help Concordia accomplish its goals. In addition, Concordia's faculty, staff, and students are committed to excellence and integrity in performance both in the classroom and in scholarly activity and research, service to the church and community through a commitment to strong partnerships with shared objectives, and a spirit of community within the university family. These programs and activities set forth an explicit value system, which has as its core faith in Jesus Christ as the Son of God and only Savior of the world. Therefore, this value system adheres to the Holy Scriptures as the communicator of that faith and commits to the Lutheran Confessions as a true exposition of the Scriptures.

Concordia's programs promote intellectual, emotional, aesthetic, physical, and spiritual growth. They nurture religious commitment, enlarge social and cultural understanding, provide insights for Christian action in the world, and facilitate effective communication. The programs provide an opportunity for intelligently selecting vocations of service to God, church, and society. Also, they are designed to develop these professional competencies and communities required for responsible participation and leadership in a complex and diverse society.

Special Characteristics of the Institution

Concordia University – Nebraska, one of 10 schools in the Concordia University System, is owned and operated by The Lutheran Church—Missouri Synod. The other nine universities and colleges are:

1) Concordia College – Selma, Alabama
2) Concordia University – Irvine, California
3) Concordia University-Chicago – River Forest, Illinois
4) Concordia University – Ann Arbor, Michigan
5) Concordia University – St. Paul, Minnesota
6) Concordia College – Bronxville, New York
7) Concordia University – Portland, Oregon
8) Concordia University-Texas – Austin, Texas
9) Concordia University- Wisconsin – Mequon, Wisconsin

The Lutheran Church—Missouri Synod operates two seminaries, one in Ft. Wayne, Indiana and the other in St. Louis, Missouri.

Concordia University founded in 1894 and originally called Concordia Seminary, prepared men as Lutheran day school teachers. This seminary opened with thirteen students, two professors, and one building. Today, the campus is situated on 120 acres with more than twenty academic and service buildings. Current offerings include liberal arts and pre-professional programs in addition to programs in education.

In 1905, Concordia added a two-year normal program to its offerings. Concordia first granted a Bachelor of Science degree for elementary teachers in 1939. The secondary education program was added in 1958 and the graduate program in 1966. Current undergraduate programs in teacher education are early childhood, special education, elementary, middle-level, and secondary education. Graduate-level programs include elementary and secondary school administration, literacy, early childhood education, ELL/ESL, and curriculum and instruction. An initial endorsement graduate level special education program was added in March 2012. All teacher education programs comply with State of Nebraska requirements and all graduates are eligible for state certification. Concordia University enrolls an increasing number of teacher education students seeking public school careers. Besides the Bachelor of Science in Education program other undergraduate programs offered include Bachelor of Arts, Bachelor of Science, Bachelor of Music, and Bachelor of Fine Arts degrees. Graduate programs include the Master of Education degree, Secondary Education Graduate Teacher Certification program, Master of Science in Family Life Ministries, Director of Christian Education Specialist Diploma program, Master of Parish Education degrees for church professionals, Master of Arts in Gerontology and Aging Studies, Master of Business Administration, Master of Arts in Human Services, Master of Public Health, and a Registered Nurse/Bachelor of Science in Nursing program, the last two of which were begun in 2012.

The legal name of the institution was Concordia Teachers College, until June 30, 1998, although the institution had used the name Concordia College since 1987 for all other purposes. On July 1, 1998, the legal name was changed to Concordia University to enhance the mission of the institution and to better prepare servant leaders for church and world.

From thirteen male students in 1894, Concordia grew to 249 students in 1953. In 1971-72, the full-time enrollment peaked at 1,715 undergraduate students and 400 graduate students enrolled in four summer sessions. In 1992, undergraduate enrollment was 876 students and approximately 150 students enrolled in three summer sessions. Concordia's total student enrollment number for 2011-12 is the largest in its 118 year history, marking the fifth year in a row Concordia has seen an increase. As of the official census date, a total of 2196 students were registered, an increase of 50 students over last year's number. The increase was notable at the Seward campus. The undergraduate total increased by 167 students, 1552 from last year's 1385. Included in that total are approximately 350 dual credit students taking college level courses at 13 different high schools across Nebraska and the United States. At the Fallbrook campus, home to Concordia's graduate programs, 644 students are seeking advanced degrees.

Concordia's primary function remains service to congregations and schools of the church. Concordia educates more men and women for careers in teacher education church work than any other college or university of The Lutheran Church—Missouri Synod. In 2010-2011 Concordia's graduates in Lutheran educational ministries were placed in 23 states and 22 Districts. Concordia-Nebraska was contacted to assist parishes/school associations in filling more than 378 different positions in educational ministries. With 31 of this year's candidates and 17 from previous years placed, 48 Lutheran teaching positions were filled. Nine additional called colloquy candidates make the total placed candidates number at 57.

That number represents 28.1% of all candidates placed in teaching positions from the Concordia University System's 10 colleges and universities.

Concordia University maintains consortium arrangements with other institutions to give Concordia students the opportunity to spend a semester in Costa Rica. Concordia University participates in a simultaneous enrollment program with the other institutions in the Concordia University System, giving students the opportunity to complete a semester on any of the other nine campuses.

Concordia is a residential college of nearly all full-time students, eighty percent (80%) of whom live in on-campus residence halls. Many Concordia students establish close relationships with each other which often last a lifetime. A variety of student activities and entertainment options provide students with opportunities for relaxation and personal growth outside the classroom. Seward, Nebraska, a town of over six thousand people, offers a safe, peaceful environment for students. Seward is 25 miles west of Lincoln, Nebraska.

Definition and Description of the Professional Education Unit

Mission of Teacher Education

Educated people in a democratic society promote a congenial community where its citizens put the common good above self-interest. Empowered by the Gospel, the church in mission strives to nurture its members through God's revelation. Education, one role of the church in mission, assists people in becoming less self-centered and more responsible to society's and the church's aims. Capable Christian teachers, qualified to meet the needs of children, youth, and adults, aid society and the church in achieving their goals.

The University accepts its mission in teacher education: The College of Education strives to prepare candidates who exemplify Christ-like leaders and who will serve as educators in Lutheran, parochial, private, and public school classrooms and parish education programs of our church and our world.

Concordia University demonstrates its acceptance of this mission by developing and maintaining quality undergraduate and graduate education programs. Current programs designed to train professional educators are:

Early Childhood Education (initial at both the undergraduate and graduate level)
Elementary Education (initial)
Secondary Education (initial at both the undergraduate and graduate level)
Special Education (initial at both the undergraduate and graduate level)
Middle Level Education (initial)
English Language Learners Endorsement (undergraduate and post-baccalaureate)
Elementary School Administration (advanced)
Secondary School Administration (advanced)
Literacy Education – Reading Specialist (advanced)
Curriculum and Instruction – Curriculum Supervisor (advanced)

Organization of Teacher Education – The Unit

The College of Education, the professional education unit of the University, is primarily responsible for preparing teachers and other professional education personnel. The College of Education organizes, unifies, and coordinates all professional education programs. The College of Education is responsible for policy development, evaluation, and coordination with other units on the undergraduate level. When changes in programs and courses will have an impact on the College of Arts and Sciences their input is sought. The Undergraduate Council deals with issues that cut across departments and programs that affect both the College of Education and the College of Arts and Sciences. The Graduate Council develops policy, evaluates, and coordinates programs at the graduate level. The Dean of Education is the head of the College of Education – Undergraduate and Graduate Studies. The undergraduate faculty elects members and leadership of the Undergraduate Council and the Graduate Council.

Concordia offers undergraduate teacher education programs in elementary, secondary, early childhood, middle-level, and special education. Each program director is responsible to the Dean of the College of Education. The student teaching directors also coordinate and supervise the student teaching placements. The student teaching I director is responsible for the initial student teaching placement including overseeing supervision of student teacher candidates at this level. The student teaching II director is responsible for the second student teaching placement and overseeing supervision of all candidates at that level.

The Dean of Education supervises admission to teacher education. The Director of Field Experiences coordinates and supervises all pre-student teaching and capstone experiences. The Placement Office maintains credential files and directs candidate placement. The director in the placement office assists with placement in church-related ministries and positions within public schools. The Dean also serves as the certification officer with the assistance of his administrative assistant.

The Dean of Education administers graduate programs in elementary and secondary administration, curriculum and instruction/curriculum supervisor, literacy/reading specialist, special education/mild-moderate initial certification, secondary graduate teacher certification, and early childhood education. Graduate candidates include those in a graduate program, those who have an undergraduate degree and are adding a teaching endorsement, and those in diploma programs leading to ecclesiastical certification.

The College of Education first sought accreditation from NCATE in 1959. The Graduate Studies program first received accreditation in 1977.

Description of the Conceptual Framework

Concordia University's Conceptual Framework was developed over two decades ago as a collaborative effort of faculty and P-12 practitioners. After the 2005 NDE/NCATE visits it was reviewed and revised into its current form. It continues today as the standard for our teacher education programs.

The Conceptual Framework has as its core the three themes of teacher education at Concordia University, Nebraska – Teaching – Leading – Learning. These three themes are expanded in the areas of knowledge, skills, and dispositions. The Conceptual Framework is aligned with InTASC standards.

The model describes teacher education as dynamic, individual, and corporate. Teacher-educators are continually analyzing and refining their own conceptual framework by engaging in meaningful interaction with other educators and in valid collaborative dialogue with learners.

The Concordia University, Nebraska Conceptual Framework

Teaching knowledge

T-K1: Student Development – InTASC 1 Learner Development
The teacher education candidate understands how children learn and develop, and can provide learning opportunities that support a child's spiritual, intellectual, social, and personal development.

Teaching skills

T-S1: Multiple Instructional Strategies – InTASC 8 Instructional Strategies
The teacher education candidate understands and uses a variety of instructional strategies to encourage student development of critical thinking, problem-solving, and performance skills.

T-S2: Planning – InTASC 7 Planning for Instruction
The teacher education candidate plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.

T-S3: Assessment – InTASC 6 Assessment
The teacher education candidate understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the learner.

T-S4: Motivation and Management – InTASC 3 Learning Environments
The teacher education candidate uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.

Teaching dispositions

T-D1: Passion for Teaching
The teacher education candidate can articulate reasons for wanting to become a teacher and demonstrates a passion for teaching and motivation to spread the Gospel and strengthen the child's value system as evidenced in preparation and performance during practicum and field experiences.

T-D2: Personal Characteristics
The teacher education candidate displays positive personal characteristics such as respect for others, dependability, punctuality, perseverance, appropriate sense of humor, social awareness, organization, management of paperwork, personal appearance and hygiene, and energy and health.

Leading knowledge

LD-K1: Content Pedagogy – InTASC 4 Content Knowledge
The teacher education candidate understands the central concepts, tools of inquiry, and structures of the discipline he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.

Leading skills

LD-S1: School and Community Involvement – InTASC 10 Collaboration
The teacher education candidate fosters relationships with school colleagues, parents, and agencies in the Christian community as well as the larger community to support students' learning and well-being.

LD-S2: Diverse Learners – InTASC 2 Learning Differences
The teacher education candidate understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.

LD-S3: Communication and Technology – InTASC 5 Innovative Applications of Content
The teacher education candidate uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.

Leading dispositions

LD-D1: Character / Faith Development
The teacher education candidate models a value system which emphasizes moral and ethical character; the Lutheran school teachers integrates faith and learning while modeling Christian mission and service according to the doctrines and teachings of the Lutheran Church – Missouri Synod.

Learning knowledge

LR-K1: Depth of Knowledge in Endorsement Area – InTASC 4, Content Knowledge
The teacher education candidate possesses a depth of subject/content knowledge for his/her endorsement as well as knowledge of teaching the faith for the LTD candidate.

Learning skills

LR-S1: Reflective Practice: Professional Growth – InTASC 9 Reflection and Continuous Growth
The teacher education candidate is a reflective practitioner who continually evaluates the effects of his or her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.

Learning dispositions

LR-D1: Lifelong Learning – InTASC 9 Reflection and Continuous Growth
The teacher education candidate can articulate the value of lifelong learning and has developed a beginning professional development plan.

Programs of Study Offered

Advanced - Graduate Level Programs:
Principal – elementary and secondary (M.Ed. emphasis in educational administration)
Reading Specialist – (M.Ed. emphasis in Literacy – we offer this with and without an ELL supplemental endorsement)
Early Childhood Education – we offer an option of an initial endorsement as part of the advanced level program
Curriculum Supervisor – we won't have sufficient graduates in this program yet so we'll only provide information and very limited data to date
Special Education – an initial level mild/moderate endorsement was offered at the graduate level beginning in March 2012. They are currently taking their second class of a 10 class sequence.

Initial - Undergraduate Level Programs:
(number of grads in last 3 years)

Art K-12 (10)
Basic Business (4)
Biology (7)
Chemistry (2)
Early Childhood (38)
Elementary Education (76)
English (16)
Geography (7)
Health (1)
Health and Physical Education K-12 (10)
History (20)
Instrumental Music (0)

Language Arts (6)
Mathematics (17)
Middle Grades (31)
Music K-12 (17)
Natural Science (0)
Physical Education (10)
Physical Science (2)
Physics (3)
Religious Education (10)
Social Science (15)
Special Education - Mild/Moderate (19)
Speech (0)
Theater (6)
Vocal Music (4)
World Language (7)

Supplemental Endorsements offered:
Coaching (data not available)
ESL – undergraduate and beyond baccalaureate (24 UG)
Information Technology (2)

Standards for Admission, Retention, and Exit from the Program

Admission to the Program

Admission to the teacher education program takes place after completion of the first three core courses in teacher education – Teaching as a Profession (Educ 101), Introduction to Education (Educ 201), and Educational Psychology (EDPS 210). The admissions process – called the Goldenrod Process because of the color of paper for the document – consists of candidate evaluations done by three professors on campus, interviews with the program director and the Dean, taking the PPST exam, receiving clearance from the Student Life Office concerning discipline action, and calculating of applicable GPAs for overall, program, and endorsements.

The candidate is fully admitted if all minimum standards have been met and all signatures are present on the form. The candidate is provisionally admitted of one or two areas are below the minimum. The candidate is denied admission if three or more areas are below the minimum. Candidates that are denied admission can reapply after the deficiencies are remedied. GPAs are reviewed each semester by the Dean's administrative assistant. A candidate must be fully admitted during the semester prior to student teaching.

Retention in the Program

GPAs for candidates are reviewed after each semester. The candidate's status is adjusted if there are changes in the GPAs that would necessitate a new status in the program. Candidates are informed via campus mail for every change of status.

A second review is conducted prior to the student teaching semester. This consists of a meeting with the candidate's advisor and signature to continue, a meeting with the Director of Field Experiences to verify the 100 hours of pre-service field experience, a meeting with the Program Director to review the candidate's portfolio, and the signature of the Dean of Education to approve the candidate's readiness for the professional student teaching semester.

Exit from the Program

Candidates must successfully complete their designated program and have an acceptable GPA for the entirety of their coursework (2.50 minimum cumulative GPA). They must also have an acceptable GPA for professional education courses (2.75), their specific program courses (2.75), and their subject or field endorsement courses (2.75 for middle level and secondary candidates). Candidates must successfully complete both of their student teaching placements and be recommended by their cooperating teacher and their university supervisor. Elementary candidates must take the PRAXIS II – EECIA. Passing the test with the state minimum is not a requirement for graduation.

The Natural Science Department

Dr. Joe Gubanyi is the chair of the Natural Science Department. The department consists of seven full-time faculty members. All seven have earned doctorates in the sciences – three from University of Nebraska-Lincoln, two from University of California-Berkley, one from University of Texas, and one from University of Wyoming. Six of them did their undergraduate work at Concordia University, Nebraska and returned to become a faculty member. They have a total of 95 years of experience at the institution.

Endorsements in natural science, physical, science, biology, chemistry, and physics are available as well as BA and/or BS programs in those areas. There are also 18 pre-professional health-related programs that draw heavily on the sciences for coursework.

Section 2 – Alignment of NDE Rule 24 Standards and Assessments

The Rule 24 Matrices for Biology, Chemistry, Physics, Natural Science, and Physical Science are included as documents on the website. Program Planning Guides are included in Appendix A.

Section 3 – Key Assessments and Findings

Major Transition Points and Key Assessments

Admission to the Program – Assessment Point 1		
Type of Data	*Source of Data/Assessment*	*Collection of Data*
GPA	Candidate / Registrar	Admission / Each Semester
Recommendations, Interview, Portfolio Review	Candidate Faculty References, Candidate, Program Director, Dean	Admission
Field Experience Evaluation	Cooperating Teacher	Required field experience
Second Year Review – Assessment Point 2		
Type of Data	*Source of Data*	*Collection of Data*
GPA	Candidate / Registrar	Each Semester
Candidate Coursework	Candidate	Professional Education Courses
Field Experience Evaluation	Cooperating Teacher	Required field experience
Admission to Student Teaching – Assessment Point 3		
Type of Data	*Source of Data*	*Collection of Data*
GPA	Candidate / Registrar	Each Semester
Candidate Coursework	Candidate	Professional Education Courses
Field Experience Evaluation	Director of Field Experiences	Required field experience
Capstone Experience	Candidate / Cooperating Teacher	Educ 461 or Educ 470
Completion of the Program – Assessment Point 4		
Type of Data	*Source of Data*	*Collection of Data*
GPA	Candidate / Registrar	Each Semester
Student Teaching I Evaluation	Cooperating Teacher / University Supervisor	Student Teaching I
Teacher Work Sample	Candidate / Program Director	Student Teaching I
Student Teaching II Evaluation	Cooperating Teacher / University Supervisor	Student Teaching II
GPA compared to Arts/Science	Candidate	Graduation
Exit Interview	Candidate / Program Director	Post-Student Teaching Seminar

Key Program Assessment 1 – GPA (Cumulative, Professional, and Endorsement)

The college examines GPA – cumulative, professional, and endorsement - to determine overall academic excellence. The cumulative GPA includes all courses taken at Concordia. Professional GPA includes all education courses required of all candidates. Endorsement GPA includes all courses required for the individual endorsements a candidate is seeking. The first evaluation takes place at the point of application to the program after the teacher education candidate has completed EDUC 101 – Teaching as a Profession, EDUC 201 – Introduction to Education, and EDPS 210 – Educational Psychology. GPAs are evaluated after each semester following admission into the teacher education program. The minimum requirement is a 2.5 cumulative GPA and a 2.75 GPA for their professional and endorsement coursework.

SECONDARY CANDIDATE GPA at Admission to Teacher Education		Total Candidates Cumulative GPA	Total Candidates Professional GPA	Secondary – Average Subject Endorsement GPA - overall	Secondary – Average GPA at Admission by Content Area for the 3-year period
Fall 09	N=17	3.33	3.49	3.15	Biology 3.23 – 10 candidates Chemistry 3.59 – 4 candidates Physics 3.40 – 4 candidates Physical Science 3.58 – 4 candidates Natural Science No candidates
Spring 10	N=23	3.53	3.65	3.57	
Fall 10	N=16	3.59	3.67	3.44	
Spring 11	N=40	3.52	3.67	3.48	
Fall 11	N=10	3.42	3.61	3.29	
Spring 12	N=36	3.58	3.76	3.43	

The average GPA at Admission is given to indicate a comparison of content area candidates with overall candidates in the secondary program across the institution. Please note the limited number of candidates in some areas.

Key Program Assessment 2 – Cumulative GPA compared to non-teacher education candidates

Concordia strives to recruit excellent students for all of our programs. In an analysis of those entering the biology profession we have collected the following data over the past three years:

	2009-2010				2010-2011				2011-2012			
	Teacher Education Graduates		Arts and Sciences Graduates		Teacher Education Graduates		Arts and Sciences Graduates		Teacher Education Graduates		Arts and Sciences Graduates	
	n=	GPA	n=	GPA	n=	GPA	n=	GPA	n=	GPA	n=	GPA
Biology	2	3.13	22	3.62	6	3.64	8	3.45	3	3.39	21	3.56

Data from the Arts and Sciences was limited to those graduating with a major in biology. This includes programs in cell and molecular biology, organismal biology, forensic science, environmental biology, conservation biology, and general biology. With the small number of program completers in teacher education it is not possible to do a statistical analysis on the data for 09-10 and 11-12. In 2010-2011 the students in teacher education had a slightly higher cumulative GPA. A 1-tailed T Test indicated that the difference was not statistically significant.

Key Program Assessment 3 – Conceptual Framework Self-Evaluation (Pedagogical Knowledge, Skills, and Dispositions)

Concordia University, Nebraska has a conceptual framework that outlines expectations of all candidates in the knowledge, skills, and dispositions required in the three areas of teaching, leading, and learning. Candidates complete the self-evaluation at admission to the program, at application for student teaching, prior to graduation, and during the first year of teaching. The first-year teacher's administrator also completes the evaluation of the teacher.

Conceptual Framework – Average Evaluation Scores – All Candidates							
1-5 scale	T-K1	T-S1	T-S2	T-S3	T-S4	T-D1	T-D2
09-10 Admission	3.84	3.59	3.57	3.37	3.63	4.45	4.63
Student Teaching	3.90	3.90	3.72	3.60	3.89	4.45	4.52
Graduation	4.36	4.26	4.36	4.19	4.32	4.74	4.77
10-11 Admission	3.77	3.63	3.75	3.48	3.82	4.4	4.52
Student Teaching	4.21	4.12	4.20	4.04	4.16	4.58	4.71
Graduation	4.49	4.49	4.64	4.38	4.49	4.93	4.87
11-12 Admission	3.88	3.77	3.80	3.60	3.94	4.51	4.61
Student Teaching	4.03	3.99	3.94	3.99	4.14	4.61	4.56
Graduation	4.63	4.68	4.70	4.53	4.62	4.87	4.87
Conceptual Framework – Average Evaluation Scores – Science Education N=4							
11-12 Science Ed-Graduation	4.60	4.56	4.71	4.62	4.65	4.87	4.83

T-K1 Student Development
T-S1 Multiple Instructional Strategies
T-S2 Planning
T-S3 Assessment
T-S4 Motivation and Management
T-D1 Passion for Teaching
T-D2 Personal Characteristics

Data is obtained via self-evaluation and is also obtained over the candidate's program from faculty members, cooperating teachers, and university supervisors. The data has shown itself to be consistent over time. A further explanation of the use of Conceptual Framework data is in the Teacher Education Data (TED) narrative below.

Prior to the first self-evaluation candidates have had a course in learning theory and student development and have written a lesson plan. They have not yet taught in a classroom as part of a field experience. The scores above are indicative of our expectations. The second self-evaluation is after their capstone experience and prior to student teaching. We expect that scores will rise since the candidates have now had at least one teaching experience of three days. The third self-evaluation is after student teaching. Scores are higher since candidates have gained additional experience in the classroom and have increased their skill and confidence levels. Additional information on the knowledge, skills, and dispositions in areas of leading and learning is available in the TED attachment to this report.

Key Program Assessment 4 – Capstone Project

All candidates complete a capstone project during Educ 461 (elementary and ECE candidates) or Educ 470 (middle level and secondary candidates). The capstone is a 3-day teaching experience in their endorsement area. It includes planning, presentation, and reflection upon the lessons taught and under the guidance of our Literacy Director and the cooperating teacher. Scores are on a scale of 0-300.

Fall 2011 Capstone		averages	N=	range	average increase
overall average	pre	176.4	53	90-250	
	post	238.9		170-300	62.5

Spring 2012 Capstone		averages	N=	range	average increase
overall average	pre	188.6	49	110-260	
	post	262.7		210-300	74.1

Capstone pre- and post-test scores
Fall 2011

		average	N=
Science/Physics	pre	150	3
Chemistry/Biology	post	203.3333	

Capstone pre- and post-test scores
Spring 2012

		average	N=
Science/Physics	pre	180	4
Chemistry/Biology	post	252.5	

Four documents are available in the attachments – Literacy Summary Data 1, 2, 3 and Literacy Summary Narrative 2011-2012. These documents include information on the skills and attitudes of the candidates from pre- and post-assessment instruments. An analysis along with a section on conclusions and directions are part of the summary narrative.

Key Program Assessment 5 – Teacher Work Sample

During a candidate's first student teaching placement he/she plans, presents, and reflects upon a unit taught during the placement. During student teacher orientation the expectations and rubric are shared with the candidate. The work sample must be successfully completed to pass student teaching one.

Fall 2011 25 candidates	not evident 0	novice 1	developing 2	basic 3	expanding 4	proficient 5
Final Score	20	21	22	23	24	25
Final Individual Results	1	4	0	4	0	16
Spring 2012 21 candidates	not evident 0	novice 1	developing 2	basic 3	expanding 4	proficient 5
Final Score	20	21	22	23	24	25
Final Individual Results	4	3	0	2	0	12

Candidates must have a score of 20 or better to pass the project. Students with less than 20 have to redo the project during Student Teaching II. Details of the scoring rubric are included in an attachment. In the spring of 2012 a review was done of the Teacher Work Sample and revisions were made to the process. The purpose was to align this project with Understanding By Design which is used in the literacy classes as part of the Capstone Project. Four documents are attached that outline the new process to be used in Fall 2012. The teacher work sample was not disaggregated by subject endorsement. That will be done beginning Fall 2012.

Key Program Assessment 6 – Field Experience and Student Teaching Evaluation (Pedagogical Knowledge, Skills, and Dispositions, and P-12 Learning)

Evaluation of the teacher education candidate is completed by the cooperating teacher during each of the field experience assignments and by the cooperating teacher and the university supervisor during student teaching experiences. The evaluations are aligned with the Conceptual Framework. Detailed data charts for the evaluations are included as 006.03B3 TED Aggregate Field Experiences and Student Teaching Reports (2 separate reports). The following is a summary of the evaluations for field experience (FE) and student teaching (ST) for each of the assessment areas. The N indicates the number of candidate evaluations. Candidates are not evaluated on all of the performance assessment areas in their field experiences. SECLuth are candidates in the Lutheran teacher education program. SECPublic are candidates in the public teacher education program.

		TK1 student devel.	TS1 instruct. strategy	TS2 planning	TS3 assess.	TS4 motiv. mgmt.	TD1 passion to teach	TD2 personal char.
N=	SECLuth	103	76	98	75	99	103	99
ave FE	SECLuth		4.53	4.9		4.92	4.81	4.89
ave ST	SECLuth	4.58	4.54	4.67	4.57	4.64	4.89	4.81
N=	SECPublic	39	23	35	22	35	41	35
ave FE	SECPublic		4.77	4.9		4.91	4.73	4.79
ave ST	SECPublic	4.66	4.6	4.83	4.79	4.68	4.84	4.91

		LD-K1 content pedago.	LD-S1 school commun.	LD-S2 diverse lrners	LD-S3 comm. technol.	LD-D1 character faith dev.	LR-K1 depth of know.	LR-S1 reflective practice	LR-D1 lifelong lrners
N=	SECLuth	103	75	75	98	76	76	103	75
ave FE	SECLuth				4.86	4.41	4.69	4.83	
ave ST	SECLuth	4.58	4.71	4.64	4.65	4.75	4.73	4.7	4.84
N=	SECPublic	39	22	22	35	23	23	41	22
ave FE	SECPublic				4.79	4.67	4.89	4.77	
ave ST	SECPublic	4.66	4.8	4.7	4.65	4.61	4.87	4.95	4.9

Teacher Education Data – TED

The Teacher Education Data System (TED) was developed to provide a systematic way to collect data, but also a way to look at that data in multiple ways benefitting from the technology that is available. The questions asked and information requested in each evaluation is matched to one of the 15 teacher performance areas of the Conceptual Framework. When data is collected and entered into TED it is automatically linked to the appropriate teacher performance area giving the unit an immediate update on each candidate and the capability to get aggregated and disaggregated data for cohorts and programs.

Data included in the Teacher Education Data System (TED) has been collected for years but not in a systematic way. It has only been in the past 2-3 years that we have attempted to see if the data we are collecting in the form of individual evaluations can tell us anything useful regarding group characteristics.

At present, TED's most useful function is that it allows unit members to access information on individual candidates and to work with them on the qualitative basis of their individual evaluation report. In looking at an individual candidate record we can determine the relative strengths and areas for improvement for the candidate. We can focus on areas that are weaker and recommend courses of action that will strengthen the areas. We are also able to encourage a candidate to grow further in areas of strength.

At this time we are studying the aggregate data to see if it reveals any useful information. There are many reasons TED data may not always be useful in aggregate form. There may be an imbalance in the specificity or detail of the characteristics measured. Candidates remain in a cohort according to the semester of their starting into the program, but TED has no way of accounting for the variety of ways candidates can move through the program. Candidates may be freshmen, sophomores, or in some cases juniors when they enter the program.

Graphs are attached and are organized to show average evaluation scores of candidate groups. Candidates are grouped according to their Cohort Catalog Year, the year in which they began studies at Concordia. Most of these students are freshmen. A small percentage of the candidates are transfers. (See 006.02 TED Data Summary 201220) Graphs show average scores by term for each group and are cumulative over time. Graphs show an age progression from left to right (older candidates on the right). They also show cumulative progress for a given cohort when read from left to right (most recent on the right).

Further analysis is included in the attachment for TED Data Summary Reports.

Section 3 – Unique Assessments

Concordia University, Nebraska offers two variations of the biology, chemistry, and physics endorsements. Candidates can choose the standard 36-37 hour programs that meet NDE certification requirements. They can also choose the comprehensive endorsement in each area. These endorsements are 55-57 hours long (see planning sheets in Appendix A) and meet a more rigorous standard of preparation than was required in the 70s and 80s in some states. Choosing the comprehensive subject area allows the candidate to focus on that one area. Choosing the 36-37 hour subject endorsement requires (by institutional practice) that a candidate choose a second subject area.

Chemistry 115 Final Exam Data

One unique assessment occurs in the introductory chemistry class. To be successful in the sciences a candidate needs basic knowledge. Chem 115 (General Chemistry) is a requirement in every science endorsement at Concordia. The exam used is the American Chemical Society (ACS) Division of Chemical Education First Term General Chemistry Exam, Form 2005. Data is available from 2007-2011 on accompanying charts for scores achieved on the exam by candidates in Chem 115 (General Chemistry). The overall average score for all fall semester classes is also included. For reference, the average national score on the exam, as reported on the ACS Division of Chemical Education website, has also been included. As can been seen from the data, our students overall perform within 1% of the national average on this standardized exam.

Data is also included for the exam for Chem 231 – Organic Chemistry.

Biology Artifacts – Final Exams and Genetics Lab

Biology – Final exams in Biology 111 (General Biology) and Biology 317 (Ecology and Field Biology) are used as assessments in the program. Test artifacts are included. An artifact is also included from the Genetics class – Bio 208.

Physics Artifacts – Final Exam and Physics Labs

An artifact from a section of the Physics 111 final exam is included. Physics 111 is a required course in physics, natural science, and physical science. Physics 110 is required for biology and chemistry endorsements.

Three artifacts are also included from physics labs which are part of the requirement for physics candidates.

Section 4 – Program Improvement

The strength of the science program lies in the instructors who teach the courses and in the facilities available to candidates. Concordia has an observatory (the Osten Observatory) on the northeast corner of campus for use in astronomy class. There is a licensed cadaver lab used for students in advanced biology classes. There is also a "crime house" used as part of the forensics courses that can be taken. A cell research lab where candidates perform research under the supervision of biology faculty members is part of advanced biology classes. These improvements have all been made within the last 7 years and have provided a wealth of learning and resources for all candidates in science and in science education.

The focus of program improvement in the near future is in upgrading the other laboratory facilities and continuing to strengthen the science program at Concordia University, Nebraska.

Appendix A – Program Planning Guides

Biology Subject (37)		
Chem-115	General Chemistry (4)	
Geog-281	Physical Geography and Geology (4)	
Phys-110	Principles of Physics (4)	
Educ-373	Methods in Secondary Science (3)	
Bio-111	General Biology I (4)	
Bio-112	General Biology II (4)	
Bio-122	General Zoology (3)	
Bio-208	General Genetics (3)	
Bio-243 or	Elem. of Human Anatomy & Physiology (4)	
Bio-343 &	Human Anatomy and Physiology I (4)	
Bio-344	Human Anatomy and Physiology II (4)	
Bio-317	Ecology and Field Biology (3)	
4 hrs from: (or Bio-343 and 344)		
Bio-225	Vertebrate Anatomy and Morphology (3)	
Bio-271	Introductory Embryology (3)	
Bio-308	Modern Tech. in Genetics & Molecular Bio. (3)	
Bio-319	Cell and Molecular Biology (3)	
Bio-345	Midwest Floral Identification (3)	
Bio-351	General Microbiology (4)	
Bio-362	Ecology & Natural History Study Tours (3)	
Bio-363	Ecology & Natural History Study Tours (3)	
Bio-371	The Biology of the Brain (3)	
Bio-399	Research in Biology (2-3)	

Biology Comprehensive Subject (57)		
Chem-115	General Chemistry (4)	
Geog-281	Physical Geography and Geology (4)	
Phys-110	Principles of Physics (4)	
Math-122	Introduction to Statistics (3)	
Educ-373	Methods in Secondary Science (3)	
Bio-111	General Biology I (4)	
Bio-112	General Biology II (4)	
Bio-122	General Zoology (3)	
Bio-208	General Genetics (3)	
Bio-243 or	Elem. of Human Anatomy & Physiology (4)	
Bio-343 and	Human Anatomy & Physiology I (4)	
Bio-344	Human Anatomy & Physiology II (4)	
Bio-317	Ecology and Field Biology (3)	
Bio-345	Midwest Floral Identification (3)	
Bio-351	General Microbiology (4)	
Bio-399	Research in Biology (2-3)	
10 hrs from (6 hrs with Bio-343 and Bio-344):		
Bio-225	Vertebrate Anatomy and Morphology (3)	
Bio-271	Introductory Embryology (3)	
Bio-308	Modern Tech. in Genetics & Molecular Bio. (3)	
Bio-319	Cell and Molecular Biology (3)	
Bio-362	Ecology & Natural History Study Tours (3)	
Bio-363	Ecology & Natural History Study Tours (3)	
Bio-371	The Biology of the Brain (3)	
Chem-345	Introductory Biochemistry (4)	

Chemistry Subject (37)		
Chem-115	General Chemistry (4)	
Chem-116	General Inorganic & Qualitative Anal. (4)	
Chem-231	Organic Chemistry I (4)	
Chem-313	Advanced Inorganic Chemistry (3)	
Chem-325	Quantitative Analytical Chemistry (4)	
Chem-345	Introductory Biochemistry (4)	
Chem-353	Physical Chemistry (3)	
Geog-281	Physical Geography and Geology (4)	
Bio-110	Principles of Biology (4)	
Phys-110	Principles of Physics (4)	
Educ-373	Methods in Secondary Science (3)	

Chemistry Comp. Subject (55)		
Chem-115	General Chemistry (4)	
Chem-116	General Inorganic & Qualitative Anal. (4)	
Chem-231	Organic Chemistry I (4)	
Chem-313	Advanced Inorganic Chemistry (3)	
Chem-325	Quantitative Analytical Chemistry (4)	
Chem-331	Organic Chemistry II (4)	
Chem-345	Introductory Biochemistry (4)	
Chem-353	Physical Chemistry (3)	
Chem-354	Physical Chemistry II (3)	

Chem-355	Physical Chemistry Lab (1)	
Chem-356	Physical Chemistry Lab II (1)	
Sci-365	Science and Society (1)	
Geog-281	Physical Geography and Geology (4)	
Bio-110	Principles of Biology (4)	
Phys-110	Principles of Physics (4)	
Math-184	Calculus I (4)	
Math-186	Calculus II (4)	
Educ-373	Methods in Secondary Science (3)	

Physics Subject (36)		
Phys-111	General Physics I (4)	
Phys-112	General Physics II (4)	
Phys-321	Introductory Mechanics (3)	
Phys-371	Electronics (3)	
Phys-381	Modern Physics (3)	
Phys-382	Advanced Physics Lab. I, II, III (1)	
Phys-383	Intro to Nuclear & Particle Physics (3)	
Phys-390	Electricity and Magnetism (3)	
Chem-115	General Chemistry (4)	
Bio-110	Principles of Biology (4)	
Geog-281	Physical Geography and Geology (4)	
Educ-373	Methods in Secondary Science (3)	

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Physics Comp. Subject (56)		
Phys-111	General Physics I (4)	
Phys-112	General Physics II (4)	
Phys-321	Introductory Mechanics (3)	
Phys-351	Classroom Activities with Physical Science (3)	
Phys-371	Electronics (3)	
Phys-381	Modern Physics (3)	
Phys-382	Advanced Physics Lab. I, II, III (1)	
Phys-383	Intro to Nuclear & Particle Physics (3)	
Phys-390	Electricity and Magnetism (3)	
Sci-202	Science of Everyday Things (2)	
Phys-331	Descriptive Astronomy (3)	
Sci-365	Science and Society (1)	
Chem-115	General Chemistry (4)	
Bio-110	Principles of Biology (4)	
Geog-281	Physical Geography and Geology (4)	
Geog-381	Meteorology and Oceanography (3)	
Math-184	Calculus I (4)	
Math-186	Calculus II (4)	
Educ-373	Methods in Secondary Science (3)	
Recommend		
Math-284	Calculus III (4)	
Math-384	Differential Equations (3)	

Natural Science Field (60-63)		
Geog-281	Physical Geography and Geology (4)	
Geog-315	Environmental Science (3)	
Geog-381	Meteorology and Oceanography (3)	
Phys-331	Descriptive Astronomy (3)	
Educ-373	Methods in Secondary Science (3)	
Students are required to take 18 hrs from one of the areas of Biology, Chemistry or Physics and 15 hrs from the remaining two areas.		
Biology		
Bio-111	General Biology I (4)	
Bio-112	General Biology II (4)	
7-10 hrs from:		
Bio-141	General Botany (3)	
Bio-208	General Genetics (3)	
Bio-317	Ecology and Field Biology (3)	
Bio-343	Human Anatomy and Physiology I (4)	
Bio-344	Human Anatomy and Physiology II (4)	
Bio-351	General Microbiology (4)	
Chemistry		
Chem-115	General Chemistry (4)	
Chem-116	General Inorganic & Qualitative Analysis (4)	
Chem-231	Organic Chemistry I (4)	
3-7 hrs Chemistry electives (300 level)		
Physics		
Phys-111	General Physics I (4)	
Phys-112	General Physics II (4)	
Phys-381	Modern Physics (3)	
Phys-382	Advanced Physics Lab. I, II, III (1)	
3-6 hrs from:		
Phys-321	Introductory Mechanics (3)	
Phys-371	Electronics (3)	
Phys-383	Introduction to Nuclear & Particle Physics (3)	
Phys-390	Electricity and Magnetism (3)	

Physical Science Field (54)		
Geog-281	Physical Geography and Geology (4)	
Geog-315	Environmental Science (3)	
Geog-381	Meteorology and Oceanography (3)	
Sci/Phys-331	Descriptive Astronomy (3)	
Bio-110	Principles of Biology (4)	
Educ-373	Methods in Secondary Science (3)	
Students are required to take 18 hrs from either Chemistry or Physics and 15 hrs from the other subject.		
Physics		
Phys-111	General Physics I (4)	
Phys-112	General Physics II (4)	
Phys-381	Modern Physics (3)	
Phys-382	Advanced Physics Lab. I, II, III (1)	
3-6 hrs from:		
Phys-321	Introductory Mechanics (3)	
Phys-371	Electronics (3)	
Phys-383	Introduction to Nuclear & Particle Physics (3)	
Phys-390	Electricity and Magnetism (3)	
Chemistry		
Chem-115	General Chemistry (4)	
Chem-116	General Inorganic & Qualitative Analysis (4)	
Chem-231	Organic Chemistry I (4)	
3-7 hrs Chemistry courses (300-level)		
Recommend		
Chem-353	Physical Chemistry (3)	
Chem-355	Physical Chemistry Laboratory (1)	

Appendix B – Program Completers

Program Completers / Biology				
Academic Year	**# of Program Completers**			
	Baccalaureate	**Post-Baccalaureate**	**Alternate Route**	**Masters**
2009-2010	1			
2010-2011	3			
2011-2012	3			

Program Completers / Chemistry				
Academic Year	**# of Program Completers**			
	Baccalaureate	**Post-Baccalaureate**	**Alternate Route**	**Masters**
2009-2010				
2010-2011	2			
2011-2012				

Program Completers / Physics				
Academic Year	**# of Program Completers**			
	Baccalaureate	**Post-Baccalaureate**	**Alternate Route**	**Masters**
2009-2010	1			
2010-2011	1			
2011-2012	1			

Program Completers / Physical Science				
Academic Year	**# of Program Completers**			
	Baccalaureate	**Post-Baccalaureate**	**Alternate Route**	**Masters**
2009-2010	1			
2010-2011	1			
2011-2012	0			

Program Completers / Nat Sci				
Academic Year	**# of Program Completers**			
	Baccalaureate	**Post-Baccalaureate**	**Alternate Route**	**Masters**
2009-2010	0			
2010-2011	0			
2011-2012	0			

Appendix B – Key Assessments List

Assessment	Type or Form of Assessment	When the Assessment is Administered	Candidate Proficiencies					Attachments	
			Content Knowledge	Pedagogical and Professional			P-12 Learning	Assessments and Scoring Guides	Data Tables
				K*	S	D			
1 GPA Cumulative Professional Endorsement	Standard calculation	After each semester	X						005.11A
2 Comparative GPA	Standard calculation	At graduation	X						
3 Conceptual Framework Self-Evaluation	Summative Self-Evaluation	At each transition point		X	X	X			Rule 24 CF
4 Capstone Project	Planning, Teaching, Reflecting Assignment	Educ 461 or Educ 470 – one semester prior to ST		X	X	X	X		005.10A Educ 461 Capstone Contract, FAQ, syllabus, Educ 470 syllabus
5 Teacher Work Sample	Planning, Teaching, Reflecting Assignment	During first student teaching placement		X	X	X	X		006.02 TWS Scoring Rubric
6 Field Experience and Student Teaching Evaluations	Formative and/or Summative Evaluation	During each field experience placement		X	X	X	X		