SO, YOU WANT TO BE A SCIENCE TEACHER...
A Pleasure To Be Here

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Department of Teacher Education
October 31, 2014
What will be done here?

- To give you an idea of available options at Rowan for teaching certification.
What does it mean to be a science teacher?

Why science teachers should not be given playground duty.

No playground duty?
Galway Bay, Ireland

- http://www.youtube.com/watch?v=n2XakurQCgU
Mussels

- Sensors monitored mussel movement in order to monitor pollutants in the bay as part of the SmartBay project initiated by IBM in March 2009 (originally initiated by Mussel Watch Program – EPA in 1976)

Path Review Summary

• **Private School**

• **Public School**
  
  – Dual-Major with Ed: Subject Matter* (Available till Fall 2016)
  
  – BA or BS with MST or MA at Rowan (summer, fall, spring, summer)

  – Post-bac program elsewhere

  – Alternate Route

• **Substitute teacher**

• **Overseas schools**
Path 1: Private School

- Finish your degree BA or BS
- Find a private school hiring in an area you think you can teach (physics, general science, math)
- Apply—highlight your education and any teaching or teaching-like experience you have
- Not recommended
Path 2: Public Schools

- Different methods depending on the state
  - Can *usually* transfer—easier if you acquire your license through a “better” process
  - NJ to just about anywhere: few problems

- Three step process
  - Establish eligibility
  - Become legally employable—a school district decides to hire you, applies for your provisional certificate and sets you up in a provisional program
  - Complete provisional program
Becoming Eligible

- **Certificate of Eligibility (CE)**: issued to individual who has **not** completed a teacher prep program, but has basic requirements for certification; authorizes you to seek and accept employment in NJ public schools requiring certification — **Alternate Route**

- **Certificate of Eligibility with Advanced Standing (CEAS)**: issued to individual who **has** completed a teacher prep program and has basic requirements for certification; authorizes you to seek and accept employment in NJ public schools requiring certification — **Traditional Route**

- **County Substitute**: intended only for person acting temporarily in replacement of a fully certified teacher when supply of properly certified teachers is inadequate; can (should) do this even if you have CE/CEAS
Eligibility Requirements

- Bachelor or higher degree
- Cumulative GPA of 3.0 (as of Fall 2015)
- At least 30 sh of “a coherent sequence of courses appropriate to the instructional area” with at least 12 sh at 300+ level; 60 sh of “liberal arts and science”
  - For Physical Science cert add 15 sh of Chemistry
- Pass the Praxis II in specific subject matter area (See http://www.ets.org/s/praxis/pdf/passing_scores.pdf)
  - For Physical Science cert add Chemistry (0245 or 5245)
- College level study in biology, health or nutrition
Emphasis on Possible Routes

POSSIBLE ROUTES TOWARDS CERTIFICATION IN SCIENCE TEACHING

NOT RECOMMENDED

ALTERNATE ROUTE
CE- TRACK

RECOMMENDED

FORMAL CERTIFICATION ROUTE
CEAS- TRACK
Options?

ROWAN COLLEGE OF EDUCATION

- DURING DEGREE BUT NO CERTIFICATION
- DURING DEGREE WITH CERTIFICATION
- AFTER DEGREE WITH CERTIFICATION

Rowan College of Education

- MINOR IN EDUCATION
- DUAL MAJOR IN EDUCATION
- MASTERS IN TEACHING
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<tr>
<th>Program</th>
<th>Result</th>
<th>Average Time Needed</th>
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<td>Minor in Education (Discontinued as of this year)</td>
<td>1 BA/ BS degree in major with education courses providing potential for future cert.</td>
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<tr>
<td>Dual Major (Discontinued as of Fall 2016)</td>
<td>2 BA/ BS degrees + teaching cert</td>
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<td>1 Masters + teaching cert</td>
<td>3+ 1</td>
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<tr>
<td>Minor in Education</td>
<td>Program Advisor</td>
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<td>(856) 256-4420</td>
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<td>Dr. Abi-El-Mona</td>
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<td>Ms. Lori Block, PHR</td>
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<td>&amp; Dr. Nancy DeJarnette</td>
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<td>Program Director</td>
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<td>(856) 256-4500 ext. 3856</td>
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<td><a href="mailto:dejarnette@rowan.edu">dejarnette@rowan.edu</a></td>
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Available Post Bacc programs

- No post baccalaureate programs in Teacher Education.
- The Post Baccalaureate Program in Reading is an endorsement program that leads to certification as a Teacher of Reading. It is available to students who have already been admitted to teacher certification programs or who already hold New Jersey teaching certificates.
- The Post-Baccalaureate Teacher of Students with Disabilities (PB: TOSD) program open to individuals who currently hold a B.A. or B.S. degree, with a minimum GPA of 2.75. It fosters an understanding of students with special needs and provides the pedagogical skills to accommodate them.
Some Data for you
(2007-2014)

- Total Number of graduates in Science and Education = 42
  - 35/42 Completed Dual Major
  - 6/42 Completed MST
  - 1/42 went Alternate Route
- 33/42 (79%) ATTAINED JOBS immediately after graduating
  - 21/33 (63.6%) were Biology
  - *9/33 (27.3%) were Physics
  - 3/33 (23%) were Chemistry

*Includes 1 physical science.
Numbers are based on recognized graduates.
The need to look ahead

- 3-5 year program- will get a degree so then what?
- Possible opportunities in science education what you can do…..
- Annual salaries, depending on context can range from 40k-100k
- A minimum of 10,000 Science teachers in our schools are needed (Rising Above the Gathering Storm report 2007; NAP)
Additional options for Post degree and cert

- Target a substitute cert – comes in handy and quick to get if you are in a CEAS track.
- Overseas teaching?
OVERSEAS TEACHING

- Schools have their own qualification standards and application procedures.
- Salary levels and benefit packages vary from school to school.
- Require a BA/BS.
- (2011-2012) Office of Overseas Schools is assisting 195 schools in 136 countries [http://www.state.gov/m/a/os/c16899.htm](http://www.state.gov/m/a/os/c16899.htm).
- All schools are subject, in varying degrees, to host-country laws and regulations pertaining to educational practices, importation of educational materials, and personnel practices.
- Contact info: Dr. Keith D. Miller, Director Office of Overseas Schools, Department of State, Washington, DC 20522-0132; Tel: 202-261-8200; Fax: 202-261-8224; E-Mail: OverseasSchools@state.gov; Web: [www.state.gov/m/a/os/](http://www.state.gov/m/a/os/) or [http://www.state.gov/m/a/os/c1686.htm](http://www.state.gov/m/a/os/c1686.htm).
For Further Information

• Rowan’s Web Site - how to navigate
  http://www.rowan.edu/

• Contact info:
  – Student Services Center: Academic Advisors
  – x 4420
The need for scientific literacy OR why become a science teacher?

“In a culture increasingly pervaded by science, mathematics, and technology, science literacy requires understandings and habits of mind...make some sense of how the designed and natural world works, to think critically and independently, to recognize and weigh alternative explanations of events and design trade-offs, and to deal sensibly with problems that involve evidence, numbers, patterns, logical arguments, and uncertainties.”

AAAS Benchmarks for Science Literacy, p.xi
If you want to make a difference in the life of our nation; if you want to make a difference in the life of a child - become a teacher. Your country needs you.

– President Barack Obama (1/25/11)