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Lessons Learned: Best Practices in NSF Noyce Program Initiation and Implementation

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Session Overview

1. Description of our NSF Noyce clinical residency program
2. Scholar recruitment
3. Reflective adaptation and sequencing of curriculum
4. Coordination with the financial aid office
5. Development and maintenance of partnerships with teachers and districts
6. Design and implementation of effective in-service mentoring
7. Additional Questions and Discussion

The UIndy NSF Noyce Program

Urban Clinical Residency and Induction Support for Preparing Secondary STEM Teachers

- Track 1: Scholarships and Stipends (grant awarded March 2017)
- One-year residency MAT program
- Prepared candidates with an undergraduate STEM degree for teaching secondary mathematics or science
- Candidates were immersed in partner schools for the entire school year
- Curriculum included:
 - education pedagogy
 - mathematics and science content
 - emphasis on Project Based Learning

Major Accomplishments

- Over four years we have graduated 20 Scholars
- To date we have 100% placement, 100% retention in the teaching profession, and many have already assumed leadership roles



Lessons Learned:

Scholar Recruitment

- Educate your own CAS faculty & students about the opportunity
- Host information sessions
- Hire a dedicated recruiter (full or part-time)
- Provide mini-internships for potential candidates
- Increased stipend for the final cohort from \$20,000 to \$30,000

Lessons Learned: Scholar Recruitment

- Work with your marketing department to produce flyers, posters, emails

YOU CAN CHANGE THE FUTURE.

BENEFITS OF A CAREER IN TEACHING

- EMPLOYMENT BEFORE AND AFTER
- FINANCIAL SUPPORT THROUGHOUT
- BE THE BEST EDUCATOR OF TOMORROW
- SEE YOUR FUTURE NOW

BENEFITS OF UINDY'S TEACH (STEM)³ PROGRAM

- PARTICIPANTS CAN APPLY TO BE A NOYCE SCHOLAR
- INNOVATIVE CLINICAL RESIDENCY IN TEACHING
- YOU PICK UP POST-GRADUATE HOUSING
- 100% PLACEMENT RATE FOR FULL GRADUATES

DO YOU WANT \$20,000 OF TUITION SUPPORT?

These students have undergraduate degrees in Math or Science. All do so within two semesters. Master of Arts in Teaching - Residency through the University of Indianapolis National Science Foundation Robert Noyce Scholarship program.

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ACE WANTS YOU TO BE A NOYCE SCHOLAR!

mindy.jack@uindy.edu
Dale S. Welch, Director: dswelch@uindy.edu or 317-738-2052

BECOME A NOYCE SCHOLAR

THROUGH THE TEACH (STEM)³ PROGRAM

RECEIVE UP TO \$20,000 TO COMPLETE A MASTER OF ARTS IN TEACHING

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Join the award-winning Teach (STEM)³ Program at the University of Indianapolis.
Program graduates have had a 100% job placement rate.
 Secondary teachers earn a competitive salary and benefits.

OUR CURRICULUM INCLUDES:

- One-year accelerated Master of Arts Program leading to licensure in teaching
- Innovative project-based learning (PBL) pedagogy
- Clinical immersion - in schools from day one
- In-program and post-program mentoring and support

ROBERT NOYCE TEACHER SCHOLARSHIPS:
 Candidates eligible to apply for a \$20,000 Noyce Scholarship (fully covers program tuition for the master's degree).
 Scholarships awarded on the basis of academic merit, commitment to teaching and need.

ELIGIBILITY REQUIREMENTS:

- Bachelor's or higher degree in math or science (new graduates or career changers)
- Cumulative GPA of 2.75 or higher; 3.0 or higher in major
- U.S. citizen, national, or permanent resident alien
- Noyce Scholars must commit to teach in a high-need school for two years

FOR MORE INFORMATION ON TEACH (STEM)³ GO TO: UINDY.EDU/TEACHSTEM

Reflection, Questions & Discussion

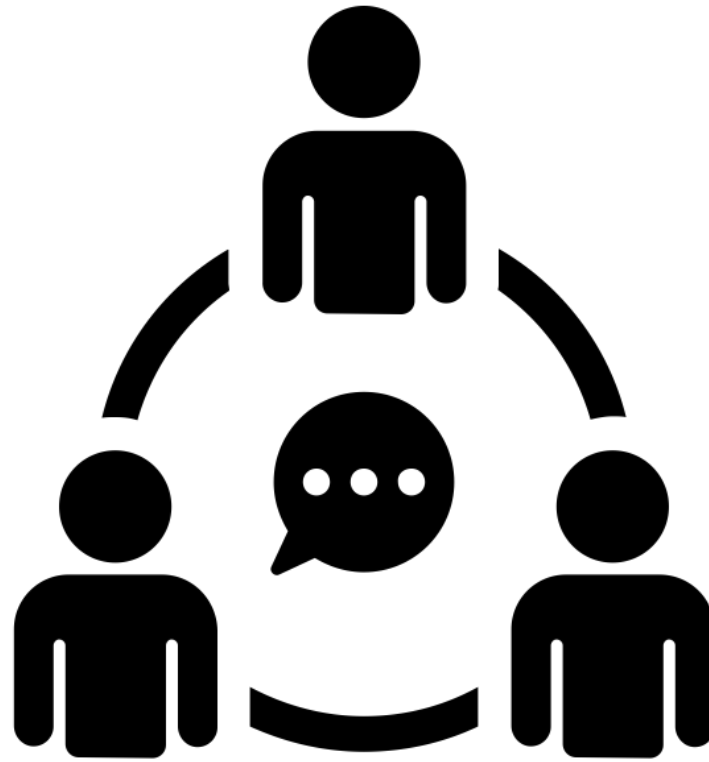


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Lessons Learned:

Reflective Adaptation and Sequencing of Curriculum

- What topics do you already include, what needs to be added?
- Be sure to account for the time involved to develop curriculum
- If designing or reconfiguring a curriculum, consider the curriculum approval process at your university and how you might streamline the need for changes
- Find a balance between theory and application

Lessons Learned:

Reflective Adaptation and Sequencing of Curriculum

What the faculty have said about the curriculum:

We designed a program with a very balanced curriculum between theory and application. We very carefully scaffolded pieces of the program, threaded things throughout with a lot of intention, and they repeated at numerous times. For example, scholars being in schools while they are learning so they can try things and practice how they work while they are learning. That embeds it in their practice when they graduate.

Lessons Learned:

Reflective Adaptation and Sequencing of Curriculum

- Survey your Scholars and partner districts, including cooperating mentor teachers, regularly to determine what is and is not working - use the feedback!
- Use program evaluation information to make adjustments in your curriculum - content and order in which content is delivered

Lessons Learned:

Reflective Adaptation and Sequencing of Curriculum

A couple of comments from our CMTs:

- *The more I see how intentional the overall program is -- when the scholars are in the school, how frequently they come at the beginning, how they phase out of the school -- all of it. This is a solid pathway to learning to teach.*
- *They have taken our feedback and changed things over time -- about the program itself, from when I gave feedback as a scholar, and now as a CMT I see my comments influencing changes. This year, I see how things are working better for scholars. The university faculty are very responsive and always very open to adjustments and scheduling and assignment due dates.*

Lessons Learned:

Coordination with the Financial Aid Office

- Involve your financial aid office early and often
- Develop:
 - Necessary informational brochures
 - Agreement to Serve and Promise to Pay (involve your University legal counsel in this process)
 - Guidebook for Scholars
 - Information that must be posted on a website as per federal financial aid regulations
 - Pre-award financial aid counseling workshops

Reflection, Questions & Discussion

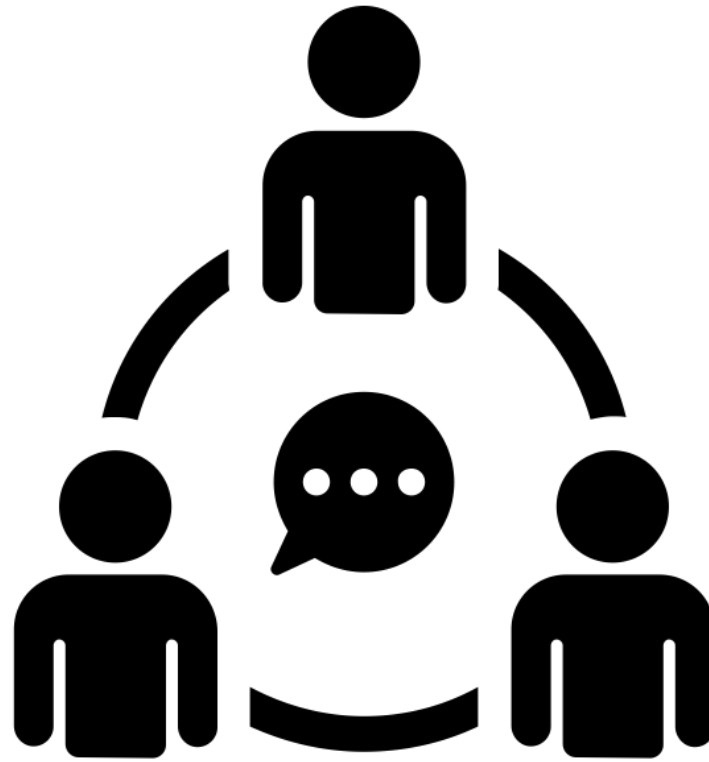


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Lessons Learned:

Development and Maintenance of Partnerships with Teachers and Districts

- Communicate, Communicate, Communicate!
- Develop an MOU with partner districts
- Recruit a master teacher within each building
- Choose cooperating mentor teachers with care
- Meet regularly with CMTs
- Communicate, Communicate, Communicate!

Lessons Learned:

Development and Maintenance of Partnerships with Teachers and Districts

Benefits for partner districts

- 70% of program graduates have been hired by partner schools
- Scholars are an extra set of hands in the classroom
- CMT's own teaching practice is enriched by engagement with Scholars
 - *She did a couple of labs that I really liked and her PBL was fantastic, just phenomenal! Her PBL is something that I will definitely use a lot of in my own teaching of that content next year.*
 - *Every time I have a candidate in my classroom, I learn something new about my own approaches, whether with the students or with the candidate. I am a department head and in my eleventh year as a teacher, and it is a good reminder of what a new teacher goes through.*

Lessons Learned:

Development and Maintenance of Partnerships with Teachers and Districts

- Very intentional CMT/Scholar matching process:
 - Temperament surveys
 - Host a lunch prior to making placements that includes the Scholars and the master teacher liaisons from each school
- Scholars provide feedback on CMTs

Lessons Learned:

Development and Maintenance of Partnerships with Teachers and Districts

- Scholars attend orientations hosted by each partner district
- Maintain accurate lists of placements, CMTs over time, etc.
- Send letters documenting CMTs services at the end of each year
- Retain CMTs by valuing their contributions to the success of the program
- Communicate, Communicate, Communicate - be as transparent as possible

Lessons Learned:

Design and Implementation of Effective In-Service Mentoring

- Establish mentoring program framework
- University-provided mentors
- Develop mentor job description
- Formalize the selection process for mentors by interviewing mentor candidates and collecting their resumes
- Be strategic about your Scholar/mentor pairings
- Introductory letter to hiring districts

Lessons Learned:

Design and Implementation of Effective In-Service Mentoring

- Develop mentoring session report forms

UIndy Face-to-Face Mentoring Session Form
(For UIndy mentor providing mentoring sessions other than sharing a lesson via videotape. To be completed by the mentor.)

Scholar's Name:
Date of mentoring interaction:
Mentor:

Part 1: Progress report
Describe the progress the Scholar has made on the "action steps" recorded on the previous mentoring report form.

Part 2: Overview
Write a brief description (classroom visit, phone conversation, e-mail correspondence, Skype session, etc.) of the type of mentoring action that occurred between you and the Scholar.

Part 3: Concern or reason for the interaction
Write a brief description that captures the Scholar's concern or the reason for your interaction with the Scholar.

What steps did you take to help the Scholar with his/her progress toward becoming an effective teacher?

Part 4: Domain and Component

Domain	Identify the domain(s) from the list of Danielson's domains below that this mentoring session addressed. Use the name and number from the list below.
Component	Identify the component(s) from the bulleted items in the list below that this mentoring session addressed.

Domain 1 Planning and Preparation <ul style="list-style-type: none"> • Demonstrating knowledge of content and pedagogy • Setting instructional outcomes • Demonstrating knowledge of resources • Designing coherent instruction • Designing student assessments 	Domain 2 The Classroom Environment <ul style="list-style-type: none"> • Establishing an environment of respect and support • Establishing a culture for learning • Managing classroom procedures • Managing student behavior • Organizing physical space 	Domain 3 Instruction <ul style="list-style-type: none"> • Communicating with students • Using questioning and discussion techniques • Engaging students in learning • Using assessments in instruction • Demonstrating flexibility and responsiveness 	Domain 4 Professional Responsibilities <ul style="list-style-type: none"> • Reflecting on teaching • Maintaining accurate records • Communicating with families • Participating in a professional community • Growing and developing professionally • Showing professionalism
Year One, Semester One Year Two, Semester One	Year One, Semester One Year Two, Semester One	Year One, Semester Two Year Two, Semester Two	Year Two, Semester Two

Danielson, Charlotte. (2007) *Enhancing Professional Practice: A Framework for Teaching*. Alexandria, Virginia: ASCD

UIndy Face-to-Face Mentoring Session Form
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Part 5: Action Steps
Describe the action steps the Scholar has agreed to take to continue his/her growth toward becoming an effective teacher.

Part 6: Follow-up Plan
Describe the type of follow-up you plan to engage in with the Scholar to ensure that s/he is experiencing success with the proposed action steps.

Domain 1 Planning and Preparation <ul style="list-style-type: none"> • Demonstrating knowledge of content and pedagogy • Setting instructional outcomes • Demonstrating knowledge of resources • Designing coherent instruction • Designing student assessments 	Domain 2 The Classroom Environment <ul style="list-style-type: none"> • Establishing an environment of respect and support • Establishing a culture for learning • Managing classroom procedures • Managing student behavior • Organizing physical space 	Domain 3 Instruction <ul style="list-style-type: none"> • Communicating with students • Using questioning and discussion techniques • Engaging students in learning • Using assessments in instruction • Demonstrating flexibility and responsiveness 	Domain 4 Professional Responsibilities <ul style="list-style-type: none"> • Reflecting on teaching • Maintaining accurate records • Communicating with families • Participating in a professional community • Growing and developing professionally • Showing professionalism
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Danielson, Charlotte. (2007) *Enhancing Professional Practice: A Framework for Teaching*. Alexandria, Virginia: ASCD

Lessons Learned:

Design and Implementation of Effective In-Service Mentoring

- Develop progress report forms

Uindy Teach (STEM)³ Progress Report

The Uindy Teach (STEM)³ provides mentoring for each Scholar for his/her first two years of teaching. In order to ensure that we remain apprised of each Scholar's progress, please complete the form below and return it to XXXXXX (xxxxx@uindy.edu) by the date indicated. This completed form will be shared with the Scholar and his/her mentor. Thank you for your collaboration.

Scholar's name:
School:

Directions: Please rate the Scholar in each domain listed below by placing a check in the box that best describes his/her performance in that domain. Indicate the name of the person completing the report and the date this form was completed. If you have a specific concern, please include that in the "concerns" section of the table, give a brief overview of any remediation that is occurring for the Fellow, and provide some suggestions for what the Scholar might do to improve.

1st report (Semester One) Please return by (insert date)		Name of person completing report:			
Date:	Performance rating				
Domain	Unsatisfactory	Basic	Proficient	Distinguished	
Planning and Preparation <ul style="list-style-type: none"> Demonstrating knowledge of content and pedagogy Demonstrating knowledge of students Setting instructional outcomes Demonstrating knowledge of resources Designing coherent instruction Designing student assessments 					
The Classroom Environment <ul style="list-style-type: none"> Creating an environment of respect and rapport Establishing a culture for learning Managing classroom procedures Managing student behavior Organizing physical space 					
Instruction <ul style="list-style-type: none"> Communicating with students Using questioning and discussion techniques Engaging students in learning Using assessments in instruction Demonstrating flexibility and responsiveness 					
Professional Responsibilities <ul style="list-style-type: none"> Reflecting on teaching Maintaining accurate records Communicating with families Participating in a professional community Growing and developing professionally Showing professionalism 					
Comments:					
Concerns: (Include specific concerns, an overview of any remediation that is occurring, and suggestions for what the Scholar might do to improve.)					

2nd report (Semester One) Please return by (insert date)		Name of person completing report:			
Date:	Performance rating				
Domain	Unsatisfactory	Basic	Proficient	Distinguished	
Planning and Preparation <ul style="list-style-type: none"> Demonstrating knowledge of content and pedagogy Demonstrating knowledge of students Setting instructional outcomes Demonstrating knowledge of resources Designing coherent instruction Designing student assessments 					
The Classroom Environment <ul style="list-style-type: none"> Creating an environment of respect and rapport Establishing a culture for learning Managing classroom procedures Managing student behavior Organizing physical space 					
Instruction <ul style="list-style-type: none"> Communicating with students Using questioning and discussion techniques Engaging students in learning Using assessments in instruction Demonstrating flexibility and responsiveness 					
Professional Responsibilities <ul style="list-style-type: none"> Reflecting on teaching Maintaining accurate records Communicating with families Participating in a professional community Growing and developing professionally Showing professionalism 					
Comments:					
Concerns: (Include specific concerns, an overview of any remediation that is occurring, and suggestions for what the Scholar might do to improve.)					

Planning and Preparation <ul style="list-style-type: none"> Demonstrating knowledge of content and pedagogy Demonstrating knowledge of students Setting instructional outcomes Demonstrating knowledge of resources Designing coherent instruction Designing student assessments 					
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Professional Responsibilities <ul style="list-style-type: none"> Reflecting on teaching Maintaining accurate records Communicating with families Participating in a professional community Growing and developing professionally Showing professionalism 					
Comments:					
Concerns: (Include specific concerns, an overview of any remediation that is occurring, and suggestions for what the Scholar might do to improve.)					

3rd report (Semester Two) Please return by (insert date)		Name of person completing report:			
Date:	Performance rating				
Domain	Unsatisfactory	Basic	Proficient	Distinguished	
Planning and Preparation <ul style="list-style-type: none"> Demonstrating knowledge of content and pedagogy Demonstrating knowledge of students Setting instructional outcomes Demonstrating knowledge of resources Designing coherent instruction Designing student assessments 					
The Classroom Environment <ul style="list-style-type: none"> Creating an environment of respect and rapport Establishing a culture for learning Managing classroom procedures Managing student behavior Organizing physical space 					
Instruction <ul style="list-style-type: none"> Communicating with students Using questioning and discussion techniques Engaging students in learning Using assessments in instruction Demonstrating flexibility and responsiveness 					
Professional Responsibilities <ul style="list-style-type: none"> Reflecting on teaching Maintaining accurate records Communicating with families Participating in a professional community Growing and developing professionally Showing professionalism 					
Comments:					
Concerns: (Include specific concerns, an overview of any remediation that is occurring, and suggestions for what the Scholar might do to improve.)					

Lessons Learned:

Design and Implementation of Effective In-Service Mentoring

- Periodic in-person mentoring sessions (Super Saturdays)
- Provide professional development requested by the Scholars
- Use the Scholars' expertise as PD providers for each other
- Solicit Scholar feedback

Reflection, Questions & Discussion

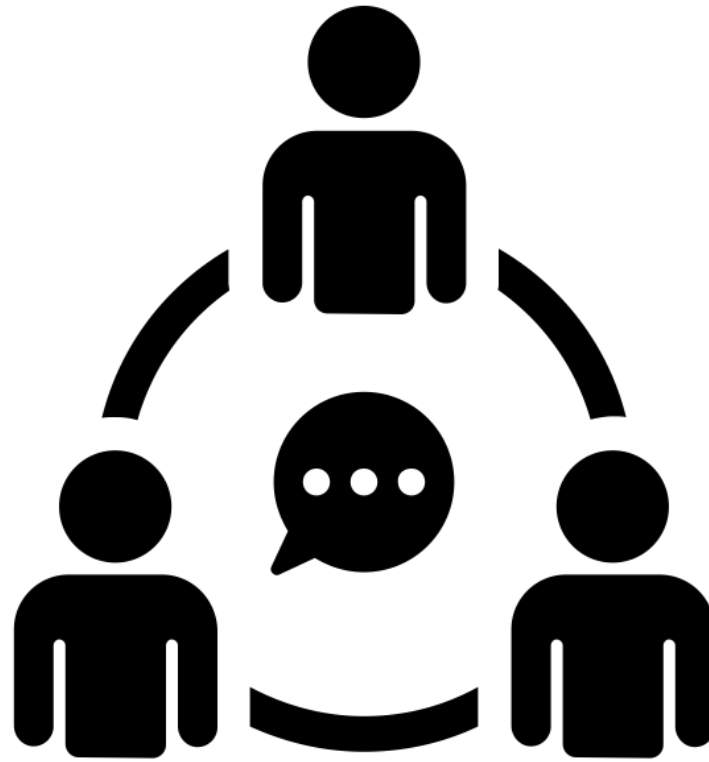


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TEACH (STEM)³

Thank You!



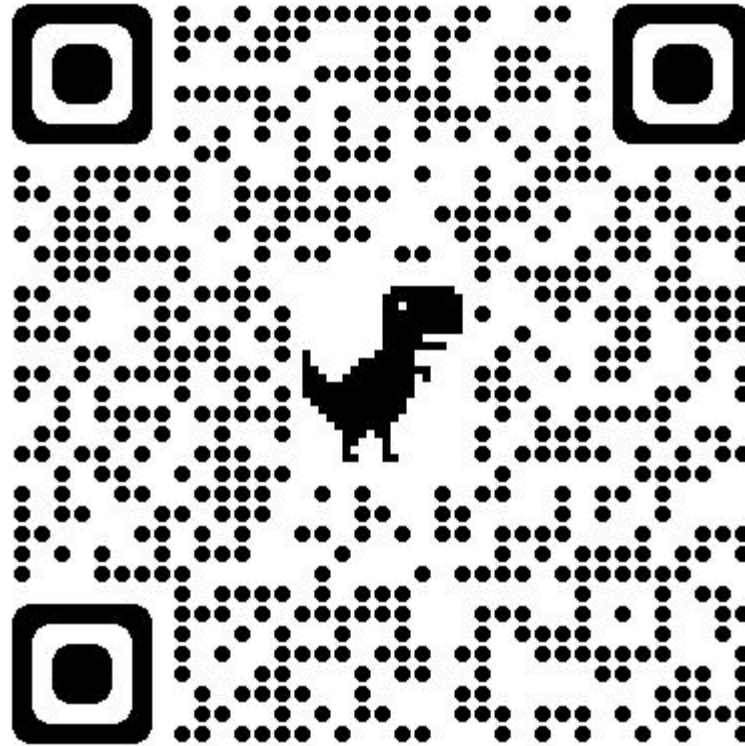
We would appreciate any comments or suggestions you might have.

- Kim Baker: bakerkm@uindy.edu
- Kathy Stickney: kstickney@uindy.edu
- Deb Sachs: dsachs@uindy.edu



TEACH (STEM)³

Resources



<https://drive.google.com/drive/folders/1haqFIWtAK7Q9LNlgrtypB4qBvJV14yaY?usp=sharing>