Shepherd University
2017-2022
Education Undergraduate Recruitment and Enrollment Plan
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OVERVIEW
The Department of Education and the Educator Preparation program, in collaboration with SU Enrollment Management and the Associate Provost, have worked collaboratively, using institutional goals, data sets both internal and external, and institutional and state planning documents to develop a strategic recruitment and enrollment plan for the next five years. Recruiting and enrolling a diverse population of students that meets the needs of our region, as well as future First-time in College (FTIC) and Transfer students requires a collaborative effort between stakeholders throughout the university. Stakeholders include faculty, staff, administrators, current students, alumni, and LEAs.

Recruiting strategies and tactics in this plan are data-informed and focused on those targeted populations of students. The recruiting plan mirrors the future student’s college search, selection, and decision timeline and is broken out into five decision phases of the enrollment cycle. Strategies and tactics will be assessed at the end of each year and revised prior to the start of the subsequent year. This plan has incorporated recommendations made by other university-wide committees and stakeholders and is aligned with the Shepherd University Strategic plan and the West Virginia Higher Education Policy Commission Institutional Compact.

OPERATIONAL DEFINITIONS
- **Marketing**- promotions and advertising creating awareness of Shepherd brand and building the overall brand.
- **Recruiting**- engagement strategies and tactics that build a relationship with prospective or applied students.
- **Prospect**- a prospective student who has inquired and provided contact information but has not applied for admission.
- **Applicant**- a prospective student who has submitted an application for admission.
- **Accepted (Admitted)**- student who has been extended an offer of admission to enroll in the university.
- **Deposited**- student who has accepted his/her offer of admission and has paid a $100 enrollment deposit or been granted a deposit waiver.
- **Enrolled (Registered)**- student who is registered in classes for the upcoming semester.
- **Student (Matriculant)**- new student who enrolled in courses and has been counted in the semester enrollment census.
ANNUAL RECRUITMENT AND ENROLLMENT BUILD CYCLE

Phase 1
Prospect Generation

Phase 2
Applied Students

Phase 3
Admitted Students

Phase 4
Deposited Students

Phase 5
Matriculation Enrollment
RECRUITMENT MARKETS and TERRITORIES: Enrollment Management Staff

Markets are defined by historical data and where human and financial resources are used to market, recruit, and enroll new first-time and transfer students. Each admission counselor has a goal to visit 40 high schools.

<table>
<thead>
<tr>
<th>Admission Team</th>
<th>States</th>
<th>Recruitment Territory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jennifer Hnatuck</td>
<td>Pennsylvania, Maryland</td>
<td>Southeast Pennsylvania, Frederick and Carroll Counties of Maryland. Frederick Community College and Carroll Community College.</td>
</tr>
<tr>
<td>Yee Lea Cho</td>
<td>West Virginia, Maryland</td>
<td>Allegany, Garrett and Washington Counties of Maryland and Monongalia, Marion, Harrison, Taylor, Preston, Lewis, Barbour, Upshur, Tucker, Randolph, Pocahontas, Pendleton, Grant, Hardy, Mineral, Hampshire, Morgan, Berkeley and Jefferson Counties of WV. Blue Ridge Community College and Hagerstown Community College.</td>
</tr>
<tr>
<td>Konrad Turnbull</td>
<td>Maryland, Virginia D.C.</td>
<td>Harford, Baltimore, Montgomery and Prince George’s County of MD. Washington, D.C. and Fairfax County, VA. Montgomery Community College and Community College of Baltimore County.</td>
</tr>
<tr>
<td>Julia Keough</td>
<td>West Virginia, Maryland</td>
<td>Hancock, Brooke, Ohio, Marshall, Wetzel, Fayette, Greenbrier, Raleigh, Summers, Monroe, Wyoming, Mercer and McDowell Counties of WV. Howard, Anne Arundel, Calvert, Charles and St. Mary’s Counties of MD. Lord Fairfax Community College and Anne Arundel Community College.</td>
</tr>
<tr>
<td>Lindsey Bordovsky</td>
<td>Maryland, Virginia</td>
<td>Central to Northern Virginia. Cecil, Kent, Queen Anne’s, Talbot and Caroline County of MD. All Northern Virginia Community College Campuses.</td>
</tr>
</tbody>
</table>

These targeted areas represent efforts to reach high-need areas of the state as identified in CAEP Standard 3. Efforts to recruit a diverse population of students from the Washington/Baltimore corridor are reflected in the territories of Admissions Staff.
ENROLLMENT TARGETS

Enrollment targets for Shepherd University’s EPP are based on historical enrollments found in the following institutional documents:


In WV, 42 counties, have indicated teacher shortages for 8 of the past 10 years. Shortages included 34 certification areas of which SU provides programs leading to certification in 13 at the undergraduate level (Early Ed, Elementary, Middle School Social Studies, Middle School Math, Art, Biology, Chemistry, General Science, Secondary Math, Music, FACS, Spanish, Secondary Social Studies) with special education offered at the MA level. Comparatively nationwide, WV is among states with the most teacher needs. SU is located on the border of 3 counties in 2 states and is part of RESA 8 which oversees WV PreK and Headstart classrooms. Positions have been filled in the previous two years, but needs remain for PreK, elementary grades 4 and 5, math, science, art, and Spanish. Additionally, four months into the school year, SU received multiple emails from neighboring counties in VA and MD inviting December graduates to apply for midyear job postings.

Current enrollments for the last two years are compared with projected enrollments for 2017-2022 in Tables 1 & 2 on the following pages.
### Table 1. Current Enrollments in SU Education Programs:

<table>
<thead>
<tr>
<th>Teaching Concentration</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Education</td>
<td>225</td>
<td>202</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>27</td>
<td>32</td>
</tr>
<tr>
<td>English</td>
<td>49</td>
<td>25</td>
</tr>
<tr>
<td>Mathematics</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Health, Phys. Ed.</td>
<td>68</td>
<td>62</td>
</tr>
<tr>
<td>Art</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td>Music</td>
<td>84</td>
<td>70</td>
</tr>
<tr>
<td>Social Studies</td>
<td>59</td>
<td>44</td>
</tr>
<tr>
<td>Spanish</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Business, FACS</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Biology</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Chemistry</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>General Science</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total enrollment in SU-EPP Programs</strong></td>
<td><strong>567</strong></td>
<td><strong>484</strong></td>
</tr>
<tr>
<td><strong>STEM enrollments</strong></td>
<td>22</td>
<td>21</td>
</tr>
</tbody>
</table>

There has been a consistent 12-14% drop in the overall headcount for the last two enrollment cycles (Fall 2015-567/3861 and Fall 2016--484/3779). Declines in overall EPP enrollment have shown a sharper drop than overall drops in institutional enrollment. This mirrors national trends that have been documented over the last five years [Reference: https://title2.ed.gov/public/44077_Title_II_Issue_Brief_Enrollment_V4a.pdf].

In working with metric targets set in the institutional compact referenced on the previous page, Shepherd University is aiming for a modest 2% annual growth in headcount. Based on this formula, and taking into account high need areas such as STEM, the projected targets for the next five years are described in Table 2.
Table 2. Projected Enrollment Targets in SU Education Programs:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Education</td>
<td>202</td>
<td>206</td>
<td>211</td>
<td>216</td>
<td>220</td>
<td>225</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>32</td>
<td>33</td>
<td>34</td>
<td>35</td>
<td>36</td>
<td>37</td>
</tr>
<tr>
<td>English</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>Mathematics*</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Health, Phys. Ed.</td>
<td>62</td>
<td>63</td>
<td>64</td>
<td>65</td>
<td>66</td>
<td>67</td>
</tr>
<tr>
<td>Art</td>
<td>19</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Music</td>
<td>70</td>
<td>72</td>
<td>74</td>
<td>76</td>
<td>78</td>
<td>80</td>
</tr>
<tr>
<td>Social Studies</td>
<td>44</td>
<td>45</td>
<td>46</td>
<td>47</td>
<td>48</td>
<td>50</td>
</tr>
<tr>
<td>Spanish</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Business, FACS</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Biology*</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Chemistry*</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>General Science*</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total Enrollment in SU-EPP Programs</strong></td>
<td>484</td>
<td>500</td>
<td>516</td>
<td>531</td>
<td>545</td>
<td>561</td>
</tr>
<tr>
<td><strong>STEM Totals</strong></td>
<td>21</td>
<td>25</td>
<td>29</td>
<td>32</td>
<td>36</td>
<td>40</td>
</tr>
</tbody>
</table>

*Numbers for the STEM fields are projected at a higher rate in consideration of the potential awarding of a Noyce Foundation grant to support teachers in the STEM who will remain in WV.
RECRUITMENT OBJECTIVES, STRATEGIES, and TACTICS

Recruiting objectives, strategies, and tactics are intentionally aligned with the future student college search, selection, and decision phases and timeline. Tactics are assigned to a lead person accountable for the completion of the tactic. Tactics are typically deadline-driven; however, some are “on-going” throughout the recruitment cycle.

**Key:** IP=In-process, On-going=continues throughout the cycle or year, F2F=face-to-face

**Phase 1: Prospect Generation**
Objective: Build and qualify a database of prospective First-time in College and Transfer students motivating them to apply.

<table>
<thead>
<tr>
<th>Tactic</th>
<th>Type</th>
<th>Description</th>
<th>Who</th>
<th>When</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MARKETING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio Advertising</td>
<td>Radio</td>
<td>WRNR. September-June. Radio commercials during local sport broadcasts</td>
<td>Kristen, Stacy</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td>Digital Advertising</td>
<td>Digital</td>
<td>Digital Commercials through Comcast in selected counties</td>
<td>Kristen</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td>Social Media Advertising</td>
<td>Digital</td>
<td>Geo-targeted FB campaigns promoting counselor high school visits and Open House programs.</td>
<td>Tim Haines</td>
<td>Sept.-Dec.</td>
<td></td>
</tr>
</tbody>
</table>
| Shepherd Website Revisions & Enhancements | Web  | ● Revise number of links under Future Students Tab  
● Refresh all admissions & financial aid content on sub-pages. Check for broken links, add pictures, student testimonials, etc. | Kristen, Bill, Tim, Joyce |                 |          |
| **EVENTS-Community College**          |            | *These efforts target high-need areas in West Virginia and the region, as well as reach a diverse population of students.* |                |                 |          |
| SU Hosted College Fair                | F2F        | Regional college fair in Wellness Center hosted by Shepherd.                 | Jen            | September       |          |
| Application Days                      | F2F        | On-site application day waiving the application fee for applicants who submit high school transcript and SAT/ACT scores. Minimum of 5 high school application days per counselor.  
**High Schools**  
1. Waynesboro High School on November 2nd  
2. Greencastle High School on November 4th | All Counselors | October, November or December |          |
<p>| HCC Advising Days                     | Face to Face| 3 Advising Days each semester                                               | Yee Lea        | September - March|          |</p>
<table>
<thead>
<tr>
<th>High School Visits</th>
<th>Face to Face</th>
<th>Visit high schools within recruitment territory. Minimum of 50 per counselor</th>
<th>All Counselors</th>
<th>September - November</th>
</tr>
</thead>
</table>
| FCC Advising Days  | F2F         | 3 Advising Days Each Semester  
  ● September 26  
  ● October 24  
  ● November 14 | Jen            | September - March |
| NVCC Advising Days | F2F         | 1 Advising Day in the fall at each campus. 2 Advising Days each semester at the Loudoun Campus, | Lindsey        | October - March |
| EWVCTC             | Face to Face| 1 Advising Day each semester at Eastern West Virginia Community and Technical College | Will           | October - March |
| Blue Ridge Advising Days | F2F | Attend on-site college visitation day in the Spring. | Yee Lea | March |
| Montgomery College Advising Days | F2F | 2 Advising Days each semester at the Rockville and Germantown Campuses. | Konrad        | October - March |
| Lord Fairfax Community College Advising Days | F2F | 2 Advising Days each semester for the Middletown Campus. 1 Advising Day each semester for the Warrenton Campus.  
  ● Sept 15 - LFCC Middletown visit/advising  
  ● Sept 29 LFCC Fauquier visit/advising  
  ● Oct 19 LFCC Middletown advising | Julia          | October - March |

### REACHING TARGETED EDUCATION STUDENTS

- **Search Name Buys**
  - Purchase names of students who meet certain criteria through SAT, ACT and NRCCUA. **Target potential education students in high-need areas; recruit diverse student populations.**
  - Kristen          | Bi-Monthly September - May |

- **View Book Mailing**
  - Direct Mailing  
  - Mail Viewbooks to prospective students. Mailed 4,000 |
  - Kristen through HBP | Monthly beginning July |

- **Application Mailing**
  - Direct Mailing  
  - Mail letter with application to all senior prospects who were previously sent the Viewbook  
  - Kristen |
  - Week of Sept. 19th |

### CAMPUS EVENTS

- **Open House**
  - F2F Event  
  - Hold 3 Open Houses in the Fall and One Open House in the Spring  
  - Jen: Planning  
  - Kristen: Invites  
  - Konrad and Lindsey: Ambassador Coordination  
  - Julia: Signage  
  - Wanda: Information Packets  
  - Kristen through HBP | 4 annually |
<table>
<thead>
<tr>
<th>Program</th>
<th>Event Details</th>
<th>Responsible</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumni Recruitment &amp; C.A.R.E. Program</td>
<td>Program</td>
<td>Alumni C.A.R.E. groups attend college fair with or without an admissions counselor and hold special local events. Delaware-Will and Winchester-Lindsey. Legacy and Friends Referral Campaign. Work with Alexis Reed in Advancement to encourage alumni to refer students. Provide Application fee waiver. Place an ad along with a prospect card in SU Alumni Magazine asking alumni who are interested in being a CARE member to complete card.</td>
<td>Kristen</td>
</tr>
<tr>
<td>Visit Campus &amp; Open House</td>
<td>Program</td>
<td>Invite prospective students to register for a campus visit or open house. Have Education specific events, such as a “Teacher Education” Day, and also have events at targeted academic partners in the surrounding counties: Berkeley, Jefferson and Morgan.</td>
<td>Yee Lea</td>
</tr>
<tr>
<td>Financial Aid Prior-Prior Year</td>
<td>Program</td>
<td>The plan to promote filing financial aid starting in Oct. 2016 has been developed and is being implemented.</td>
<td>Fin Aid &amp; Konrad</td>
</tr>
<tr>
<td>FA Workshop</td>
<td>Program</td>
<td>FA presentation to local HS Counselors hosted by Shepherd University at Martinsburg Center. Assistant Provost to attend; invite Education Faculty.</td>
<td>Joyce</td>
</tr>
<tr>
<td>Financial Aid Literacy Presentation</td>
<td>Program</td>
<td>Carla Hunter, school counselor at Washington High School and Eastern Panhandle Alumnae Chapter of Delta Sigma Theta Sorority, Inc. The chapter would like your office to facilitate the first workshop giving an overview of financial aid and the FAFSA. Our target populations are parents and middle/high school students. We would also like to hold the workshop on the campus of Shepherd University.</td>
<td>Joyce &amp; Julia</td>
</tr>
<tr>
<td>TARGETED PUBLICATIONS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education Program “One-Pagers”</td>
<td>Program</td>
<td>Ask each content area chair to fill in Program Outline template. Print these for display in front office and have PDF versions readily accessible for counselors to email.</td>
<td>Julia, Bill</td>
</tr>
<tr>
<td>HS Counselor Newsletter</td>
<td>Program</td>
<td>Three times a year, September, January, April.</td>
<td>Lindsey</td>
</tr>
<tr>
<td>Student newsletter</td>
<td>Program</td>
<td>An electronic newsletter highlighting current students, campus</td>
<td>Lindsey</td>
</tr>
<tr>
<td>Email</td>
<td>happenings, scholarships, sports, etc. Send 2x annually.</td>
<td>&amp; February</td>
<td></td>
</tr>
</tbody>
</table>
Phase 2: Applied Students
Objective: Motivate students who have applied to complete their admission application so an admission decision can be made. SU-EPP faculty and staff will reach out to admitted student in conjunction with Admissions staff to assist students in sending documents, invite students to campus events, and provide a pathway for applied students wherever possible to become admitted and enrolled students.

<table>
<thead>
<tr>
<th>Tactics</th>
<th>Type</th>
<th>Description</th>
<th>Who</th>
<th>When</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incomplete Postcard</td>
<td>Direct Mailing</td>
<td>Send postcard to New Applicants upon receipt of application requesting documents</td>
<td>Jackie &amp; Emmy</td>
<td>Weekly</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Incomplete Email</td>
<td>Email</td>
<td>Send email indicating missing documents - Incomplete 4-7 weeks</td>
<td>Hobsons</td>
<td>Monthly</td>
<td>IP</td>
</tr>
<tr>
<td>Incomplete Mailing</td>
<td>Direct Mail</td>
<td>Sent letter indicating missing documents - Incomplete 8+ weeks</td>
<td>Hobsons</td>
<td>Monthly</td>
<td>IP</td>
</tr>
<tr>
<td>Thank You Notes</td>
<td>Direct Mail</td>
<td>Hand written thank you notes from counselors to students who attended Open House</td>
<td>Julia</td>
<td>After Open House</td>
<td>IP</td>
</tr>
<tr>
<td>Veteran Checklist</td>
<td>Direct Mail</td>
<td>Send Veteran checklist detailing information to receive veteran benefits. Mail along with acceptance letter.</td>
<td>Jen</td>
<td>Upon Admission</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Legacy Program</td>
<td>Legacy Scholarship? App Waiver?</td>
<td></td>
<td>Kristen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student newsletter</td>
<td>Electronic/Email</td>
<td>An electronic newsletter highlighting current students, campus happenings, scholarships, sports, etc. Send 2x annually.</td>
<td>Lindsey</td>
<td>Novembe r &amp; February</td>
<td></td>
</tr>
<tr>
<td>Visit Campus &amp; Open House</td>
<td>Postcard, email</td>
<td>Invite applied students to register for a campus visit or open house.</td>
<td>Yee Lea</td>
<td>Sept., Oct. Nov.</td>
<td></td>
</tr>
</tbody>
</table>
**Phase 3: Admitted Students**

Objective: Build relationships with applied students, identify enrollment challenges, and motivate students to confirm their enrollment. EPP faculty and administrators will continue to partner with efforts targeted at moving admitted students to being deposited and enrolled students. This includes composition of targeted direct mail communications and events for accepted students.

<table>
<thead>
<tr>
<th>Tactics</th>
<th>Type</th>
<th>Description</th>
<th>Who</th>
<th>When</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admission File Reviews</td>
<td></td>
<td>Start admission file review and accepting students week of Sept. 12th.</td>
<td>Counselors</td>
<td>Sept.</td>
<td>On-going</td>
</tr>
<tr>
<td>Department Letters</td>
<td>Direct Mail</td>
<td>Letter to student from department chair of chosen major. Letters are generated each Monday.</td>
<td>Stacy Hobsons</td>
<td>Oct.</td>
<td>On-going</td>
</tr>
<tr>
<td>Phone Call Decision</td>
<td>Phone Call</td>
<td>Keep the personal relationship by calling student upon admissions decision informing them of decision</td>
<td>Counselors</td>
<td>Daily, start Septembe</td>
<td></td>
</tr>
<tr>
<td>Scholarship Awards</td>
<td>Direct Mail</td>
<td>Award Academic Scholarships to admitted freshmen who meet the criteria. Awarding is done each week. Education faculty will contact scholarship recipients to congratulate them and welcome them to the department.</td>
<td>Kristen</td>
<td>October-June</td>
<td></td>
</tr>
<tr>
<td>Accepted Student Day</td>
<td>F2F Event</td>
<td>Send invitation to all admitted freshmen for Accepted Student Day-Jan.</td>
<td>Jen</td>
<td>March 4, 2017</td>
<td></td>
</tr>
<tr>
<td>Encourage Deposit</td>
<td>Direct Mail</td>
<td>Send letter informing student of importance of deposit</td>
<td>Kristen</td>
<td>8+ weeks past admission</td>
<td></td>
</tr>
<tr>
<td>Student Ambassador “PenPal”</td>
<td>Email</td>
<td>Student ambassadors create a general email about their SU experience and reach out to applicants from their hometown welcoming them and offering to answer any questions</td>
<td>Jen Hobsons</td>
<td>December</td>
<td></td>
</tr>
<tr>
<td>Checklist/Timeline</td>
<td>Direct Mail</td>
<td>Send Timeline along with acceptance detailing next steps for enrollment.</td>
<td>Konrad</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>Transfer Degree Evaluation</td>
<td>Direct Mail</td>
<td>Mail degree evaluation along with eval guideline flyer.</td>
<td>Emmy</td>
<td>Two weeks after admission</td>
<td></td>
</tr>
<tr>
<td>Social Media Invite Postcard</td>
<td>Direct Mail</td>
<td>Send social media card to admitted students inviting them to join social media pages.</td>
<td>Julia</td>
<td>Week after Admission</td>
<td></td>
</tr>
<tr>
<td>New Res Hall Lottery</td>
<td>Direct Mail</td>
<td>Send info about New Residence Hall and lottery program for first</td>
<td>Bill and</td>
<td>Novembe</td>
<td></td>
</tr>
</tbody>
</table>
**Phase 4: Deposited Students**

Objective: Strengthen relationship with future students by identify and resolving challenges associated with matriculating to the University. EPP faculty and administrators will continue to partner with efforts targeted at moving deposited students to enrolled students. This includes composition of targeted direct mail communications and events for accepted students.

<table>
<thead>
<tr>
<th>Enrollment Tactics</th>
<th>Type</th>
<th>Description</th>
<th>Who</th>
<th>When</th>
<th>Done</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation</td>
<td>Direct Mail</td>
<td>Send Letter inviting deposited student to register for Orientation</td>
<td>Kristen</td>
<td>Weekly beginning March 1</td>
<td></td>
</tr>
<tr>
<td>Residence Life Application</td>
<td>Provide List</td>
<td>Provide List to Director of Residence Life of Campus 1 students who have paid a deposit so Residence Life may mail housing form</td>
<td>Kristen</td>
<td>Weekly beginning February 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Promote Living on-campus...features &amp; benefits. New housing lottery/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Aid Award</td>
<td>Direct Mail</td>
<td>Financial Aid Sends Award Statements</td>
<td>Financial Aid</td>
<td>Dec 1</td>
<td></td>
</tr>
<tr>
<td>Stretch Mailing</td>
<td>Direct Mail</td>
<td>Provide List of deposited students in need of stretch courses to the AAC</td>
<td>Jen</td>
<td>April 1</td>
<td></td>
</tr>
<tr>
<td>Shepherd Email</td>
<td>Direct Mail</td>
<td>Send student email address upon deposit. Will need IT to make it happen</td>
<td>Bill Joey Dagg</td>
<td>Monthly beginning January</td>
<td></td>
</tr>
<tr>
<td>Ram Pulse Access</td>
<td>Direct Mail</td>
<td>Send deposited students a postcard about Ram Pulse and invite them to begin applying to clubs/orgs</td>
<td>Yee Lea</td>
<td>Two weeks after email is</td>
<td></td>
</tr>
<tr>
<td>Alumni Recruitment &amp; C.A.R.E. Program</td>
<td>Letter, cards, or calls</td>
<td>Alumni campaign congratulating deposited students. Communication vehicle could include letter, personal notes, or calls.</td>
<td>Lindsey Will</td>
<td>November, February, April</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
<td>-------------</td>
<td>--------------------------</td>
<td></td>
</tr>
<tr>
<td>Invitation to Accepted Student Day</td>
<td>Direct Mail</td>
<td>Send invitation to all admitted and deposited freshmen for Accepted Student Day. <strong>Education faculty will meet with newly accepted students to welcome them to the department and provide opportunities for engagement.</strong></td>
<td>Jen</td>
<td>January</td>
<td></td>
</tr>
</tbody>
</table>
## Phase 5: Matriculation/Enrollment

**Objective:** Build relationships with confirmed students.

<table>
<thead>
<tr>
<th>Enrollment Tactics</th>
<th>Type</th>
<th>Description</th>
<th>Who</th>
<th>When</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Orientation Step 1</td>
<td>Event</td>
<td>Hold Several Orientation Events in June, July and August</td>
<td>Admissions</td>
<td>June, July and August</td>
<td></td>
</tr>
<tr>
<td>*Orientation Step 2</td>
<td>Event</td>
<td>Friday before classes begin, event for all incoming student. Admissions assists in publicizing event and lending Ambassadors to help coordinate tours.</td>
<td>Lindsey Ambassador(s)</td>
<td>August</td>
<td></td>
</tr>
<tr>
<td>Education Student meeting</td>
<td>Event</td>
<td>Education faculty will meet with newly enrolled students to welcome them to the department and provide an in-depth orientation to the program.</td>
<td>Admissions Staff; Education faculty and student reps.</td>
<td>June, July and August</td>
<td></td>
</tr>
<tr>
<td>Last Dollar Grant</td>
<td>Scholarship</td>
<td>Assist enrolled students who are struggling with clearing their bill by awarding 1x Last Dollar Funds</td>
<td>Admissions, Financial Aid and Business Office</td>
<td>August/September</td>
<td></td>
</tr>
<tr>
<td>Social Media Campaign</td>
<td>SM &amp; Print</td>
<td>Utilize FB, Twitter, Instagram, and any other SM options we have. Direct-mail a small poster with message like #Shepherd Fall 2016 or #Shepherd Class of 2020 to use when taking and posting selfies.</td>
<td>Julia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Aid Package</td>
<td></td>
<td>Communicate with students families regarding their FA package. Need FA staff input here.</td>
<td>Financial Aid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alumni Recruitment &amp; C.A.R.E. Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*An education faculty representative is presentation at Orientation Step 1 & 2 activities to assist students in the registration process. Admitted students also have the opportunity to meet their academic advisor at these events.*
## Targeted Campus, College, Department Activities & Events for Education

<table>
<thead>
<tr>
<th>Tactic</th>
<th>Type</th>
<th>Description</th>
<th>Who</th>
<th>When</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Counselor Workshops</td>
<td>On Campus</td>
<td>Hold counselor workshop on campus with free meals and programming directed toward assisting HS counselors with advising students on college decision and financing, etc. Create survey for counselors to bring to HS counselors about topics, best dates, etc. Assistant Provost to participate along with targeted education faculty and students.</td>
<td>Jen</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>HS Bus Trips</td>
<td>On Campus</td>
<td>Work with local high schools to provide bus trips with campus tour and lunch. Assistant Provost to participate along with targeted education faculty and students.</td>
<td>Admissions, Lindsey</td>
<td>Fall and Spring</td>
<td></td>
</tr>
</tbody>
</table>

## Meetings w/ Schools, Departments, Offices

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Affairs, Dean’s Council</td>
<td>Fall/Spring</td>
<td>EM Vision</td>
</tr>
<tr>
<td>School of Natural Sciences &amp; Mathematics</td>
<td>Fall/Spring</td>
<td>EM Vision</td>
</tr>
<tr>
<td>School of Business &amp; Social Sciences</td>
<td>Fall/Spring</td>
<td>EM Vision</td>
</tr>
<tr>
<td>School of Ed. &amp; Professional Studies</td>
<td>Fall/Spring</td>
<td>EM Vision</td>
</tr>
<tr>
<td>Department Chair Meeting</td>
<td>Fall/Spring</td>
<td>Open house Shopping Session &amp; Major One-pager Piece</td>
</tr>
<tr>
<td>School of Arts and Humanities</td>
<td>Fall/Spring</td>
<td>EM Vision</td>
</tr>
</tbody>
</table>

Recognizing that potential education students may come from any discipline, and that student may seek a baccalaureate degree and teaching certification, meetings with enrollment management and all academic stakeholders is an integral part of the recruitment/enrollment plan.
Recruitment Plan Further Documentation

The following minutes from the PEUC document the discussion, modification, and adoption of PEUC specific activities to the proposed recruitment plan.

Professional Education Unit Council Minutes
Wednesday, November 16, 2016


Dr. Johnson called the meeting to order at 3:10 p.m.

JUNCTURE REVIEW
Members received the candidates for Juncture 1 dated November 16, 2016. Members have one week to notify Dr. Johnson, in writing, with concerns or objections of juncture candidates. If nothing is forthcoming, a letter will be sent to the students awarding the status as indicated.

CAEP: 21 Days left to gather information and make any required changes for the self-study report
Recent CAEP

CAEP Related Policy Discussions

Electronic Portfolios: Becky Mercado
Dr. Mercado reviewed what had been covered two meetings ago. It was clarified that we first had to decide whether a portfolio with common elements should be adopted as a program wide unit assessment. A motion was made and seconded to "set up a committee to develop a unit wide portfolio." This committee will solicit feedback from PEUC members and determine what pieces should be included as those common to all programs and will be the foundation upon which individual programs may add specific requirements.

Moved and seconded to set up a committee to develop a unit wide portfolio. The motion passed with a vote of 12 in favor, 1 opposed, 2 abstained.
Dr. Hannah noted that, as an assessment, the development of a portfolio will need to follow the procedures outlined by CAEP to establish validity and reliability. All recognized this as accurate.

Disposition Assessment Recommendation: Rhonda Hovatter

Dr. Hovatter indicated that she had contacted several institutions to see what they were using as a disposition assessment. All of the institutions had developed instruments under NCATE and have not gone through the CAEP Standards development. She said that all involved the same types of elements as our Pro05 but they had indicators for each rather than an arbitrary rating with no descriptors. She has been unable to locate any proprietary disposition assessments that we could simply adopt.

Dr. Johnson commented that the Pro05 will not meet CAEP standards so we will have to begin the process of developing a disposition assessment following the CAEP guidelines.

Dr. Hovatter said she would upload the instruments used by other institutions to the PEUC Sakai site so that we could examine them in starting this process.

Three Point Recruitment Plan: LeAnn Johnson

Dr. Johnson reviewed a document prepared by Standards group 3

Recruitment Plan

3.1 The provider presents plans and goals to recruit and support completion of high-quality candidates from a broad range of backgrounds and diverse populations to accomplish their mission. The admitted pool of candidates reflects the diversity of America’s P-12 students. The provider demonstrates efforts to know and address community, state, national, regional, or local needs for hard-to-staff schools and shortage fields, currently, STEM, English-language learning, and students with disabilities.

3 Point Plan

1. Local High School Visits: (Berkeley=4, Jefferson=2, Washington=7)
   a. 1 Time Per Academic Year
   b. PEUC Members join an admissions counselor and do a high school visit
      Or
      Set up a Visit at Their Own Convenience (Admissions is willing to loan materials)

Goal: Increase visibility of the education programs especially for STEM fields

Dr. Johnson invited comments related to this first proposal.

Dr. Conley commented that the science department has already discussed a similar proposal and that they felt there was too much for
faculty to do already. Dr. Burke concurred. Faculty feel that they are being “piled on” and that faculty load needs to be distributed differently if we are expected to do any more than we are already doing.

Dr. Conley suggested that, alternatively, a team of faculty members could skype into a high school to talk to interested students and indicated that faculty already have significant connections with P-12 students through science fair judging and such.

Dr. Hannah commented that this is the job of admissions and that expecting the department to do more is untenable. She indicated that it is more than just a couple of hours. That it takes time to set up the venue with the school in addition to the time actually spent at the school. She also indicated that we are “already out there” and that our students are great role models to their P-12 students.

She cited a middle school principal as indicating that this was one of the reasons why they liked having our students placed in their school and that Ranson Elementary School had commented that “they know us” and rather than asking for more, that we document what we are already doing. Dr. Tuttle said that he does a lot in the schools but has never had a vehicle for being able to formally document it.

It was suggested that we work with our teacher candidates to have them talk student-to-student. That it could become a program requirement.

Linda Sell commented that most high schools have college fairs and perhaps we could have some of our students join us in attending them.

Dr. Cole mentioned that when Martinsburg High School had their Harlem Renaissance Fair, faculty and candidates had participated with very positive results.

Dr. Hovatter mentioned that in her previous institution, participating in a career day was part of the methods field hours completed by her students.

Dr. Johnson invited Paige Palmer, as our student representative, to respond to the idea of promoting more student-to-student interactions as part of a recruitment plan. Paige said that she felt that it would mean more to high school students to talk to teacher candidates, but that we need to be aware that not all of our college students have had the same positive experiences with Shepherd and that there is potential for the opposite to happen.

Dr. Johnson asked if in asking students to do more, that this would be asking too much for our students who are already extremely busy with many holding down jobs in addition to classes and field hours. Dr. Kennard strongly concurred.

Dr. Mercado said that if we have ready-made brochures to use, it would be helpful and Dr. Johnson reminded everyone that the Chairs had been told that admissions was in the process of developing such flyers that we could use.

Dr. Johnson wrapped up this topic by indicating that the Standard 3 group would revise this part of the recruitment plan accordingly and that a system would be set up for faculty to document their recruitment related contacts with P-12 students.

Dr. Johnson introduced the second point of the proposed recruitment plan.

2. SU Education Fair
   a. Bring High School Students to Shepherd for a Day (Pilot March 2, 2017)
   b. Pair up with a Teacher Candidate to attend morning classes
   c. Campus tour
d. Series of hands-on workshops on educational topics

e. Candidate/Student/Faculty social activity late afternoon

Goal: Form personal connections with high school students so they are more likely to choose a Shepherd University education program.

It was suggested that we tie into events already going on across campus such as Shep-O-Treat or the Eagle School 5th grade campus tours. Dr. Johnson commented that recruitment of high quality diverse individuals into teacher education is different than generic community good will and that it is a pretty big jump to try to support a 5th grade field trip as a teacher education recruitment tool. Dr. Androzzi contributed the idea that having a special activity to bring potential teacher education students to Shepherd can also apply to transfer students and cited the Physical Education Department’s PE Central All-Day workshop that brought in 10 students from Montgomery College.

Several suggestions included having high school students ‘sit in’ on classes or shadow a teacher education student throughout the day. Dr. Johnson indicated it would be part of the planned activity.

It was also mentioned that it would be good for the visiting students to be able to stay in the dorms with their mentor teacher candidate. LeAnn commented that group 3 had checked into this but there were concerns from Residence Life about underage students in the dorms and university liability and so they had dropped the idea of staying overnight and focused on a daytime activity.

In the beginning, we would want to pilot a small number of high school students before opening future education fairs to larger numbers.

Dr. Hargrove said that if we were to go with the March 2 date that had been suggested by KDP students who would be involved, it would interfere with the PED students being in the field that week. Timing is something that would need to be worked on to insure that a maximum number of teacher candidates are on campus the day that high school students would attend.

Concerns were raised about money needed for food and liability if we were to do this. Linda Sell commented that we might be able to have someone from the high school on campus to mitigate potential liability issues.

Dr. Conley mentioned that we shouldn’t forget that people coming to the university with intent to go into other fields, shouldn’t be overlooked because, if well advised, they may be able to get a double major in that field with added teaching certification as was proposed in the Noyce Grant. Dr. Johnson indicated that they recognize this possible source of high quality candidates and that the education fair could potentially include them but that the focus for the first pilot would be on high school students who have indicated an interest in teaching.

Dr. Johnson summed up the conversation by concluding that we would pursue the development of a pilot SU Education day next semester and that careful attention would be paid to liability issues and to insure that it was a well-planned positive experience for high school students who attend.

Dr. Johnson introduced the third point of the recruitment plan.

3. Establish/Update Advising Pathways from Community Colleges that SU is Targeting (25% tuition discount) (HCC, FCC, Montgomery, Northern Virginia, Lord Fairfax)

a. Different from formal agreements with Blue Ridge and Eastern

b. Example, PSC = 13 new courses articulated since June, EDUC 150 being offered as a hybrid so transfer students can take
it concurrently with their 2 year college classes.

c. PE has started working with Montgomery College

Goal: To make us a viable option for potential transfer students

Montgomery and Northern Virginia are much more diverse than SU which will show attempts to “recruit students from a broad range of backgrounds and diverse populations”

Fall 2015 Cohort=35 Students (33 White, 1 Hispanic, 1 2 or more races)
Spring 2016 Cohort = 36 Students (35 White, 1 Asian)
Fall 2016 Cohort= 26 Students (25 White, 1 Black/AA)

Dr. Johnson explained the university's focus on the five colleges listed in the plan and that we felt that by updating or creating advising pathways with them, as has been done since May for Potomac State College, will encourage students to consider Shepherd for transfer. It should be noted that Montgomery College and Northern Virginia have much more diverse student bodies than our local area and recruitment for transfer students on these campuses would likely result in more diversity in our current teacher education population. Dr. Androzzi described the work done by physical education with Montgomery County along these lines.

Dr. Cole noted that she thought that of the three points, this would be the most successful at increasing the diversity of our cohorts which as noted in the plan, are quite low even though they are representative of the surrounding community.

Dr. Johnson turned to a PEUC policy that could potentially negate students transferring from another university and the committee’s recommendation for eliminating it.

Stumbling Block to Transfer Students: PEUC Policy: 24 Credits before being allowed to Juncture. We would propose to reduce this to 12 credits that would allow students to Juncture after completing one semester at SU.

Due to concern about dispositions cited previously as reason for this, we suggest adding a caveat to the Juncture disposition requirement that students who do not have Pro-05’s from EDUC 150 and EDUC 200 need three letters of recommendation from a previous course instructor, college advisor, and field faculty/cooperating teacher).

Dr. Hannah indicated that the committee must have an old copy of the PEUC Policy and Procedures Handbook, that this policy had been changed many years previously and that students only had to complete nine (9) credits before being allowed to juncture.

Several other PEUC members concurred that this was indeed the case.

Because the currently agreed upon policy is more friendly to potential transfer students than the committee’s recommendation, the recommendation with its attendant caveat to require letters of recommendation to make up for fewer experiences was dropped.

At this point, the order of the agenda was modified to insure that other business was voted on.

APPROVAL OF MINUTES
Student Petition:

Dr. Johnson outlined the background of a petitioning FACS student who had joined the Blue Ridge Collaborative Program that did not include FACS and thus prevented her from applying for juncture at Blue Ridge before transferring to Shepherd University. Upon transferring, she found that a poor academic record from 1988 gave her an institutional GPA too low to juncture despite an overall GPA of 3.18. Normally such a student would be advised to retake the classes previously failed to bring up his or her GPA, however, the student had already retaken most of the courses at Blue Ridge which meant that the Academic Forgiveness policy would not apply. After much discussion and support from Dr. Corpus, her advisor, a motion was made to allow substitution of courses retaken at Blue Ridge for computation of an institutional GPA for juncture purposes. This motion passed with 10 in favor, 3 abstentions and 1 opposed.

It was noted that even with this motion, the student would have to receive 16 credits of A’s and 9 credits of B’s between this semester and next semester to obtain the required GPA for full status when her juncture application will be reviewed next semester.

CAEP Work Groups were given about 15 minutes to get reports organized:

CAEP Work Group Reports

Standard 1 Group Progress Report
Dr. Hannah reported that Standard 1 group has gone through the ST-11 and the EDUC 380 unit plan and identified those pieces that would be pulled for analysis for the self study report.

Clarification regarding SPAs was sought. It is our understanding that the Site review team will have access to the SPA’s and that approved SPA’s reflect content specific knowledge. The fact that the SPA’s are in and approved is an implicit “OK’ for CAEP. It was also noted that while some SPAs such as Health used data from the ST-11, others such as P.E. and Social Studies did not.

Dr. Hannah indicated that group 1 has not yet looked at the TPAs or grades. She asked Dr. Johnson to send her copies of the rubrics for the edTPA and PPAT which she agreed to do.

Standard 2 Group Progress Report

Group 2 reported that they are making good progress.
Standard 3 Group Progress Report

Group 3 deferred further reporting in light of the time since most of the meetings discussion had been to make determinations as to a significant portion of Group 3’s tasks.

Standard 4 Group Progress Report

It was stressed that Group 4 is the only standard in which ALL elements must be met and that it required a workable PLAN.

Linda Sell encouraged groups to watch the CAEP webinars that were sent to everyone for additional clarification as to CAEP expectations.

Dr. Burke indicated that, as a group, they still had a great deal of questions about the surveys.

Dr. Johnson summarized that employer satisfaction surveys could be sent to all three states, that there are no restrictions on where our students get jobs, but that we need at least 20% back. She indicated that the NDSU surveys will be available very soon, hopefully, in time to catch this semester’s completers for follow up over the next three years.

Linda stressed that whatever group 4 says we are going to do in March, must result in an action plan. On November 4, we will be expected to show proof that we are taking action towards fulfilling the plan.

Dr. Allison indicated that 4.1 is very difficult and that 100% of the data must be supplied by schools and that FERPA is a potential problem. She wanted to know what we are planning to do to get it from the schools.

Linda concurred that while it is a good idea in theory, it is not easy to do in practice. However, it is being used as the way we know that we have a good program. She also indicated that we can’t wait for the state to give us the data, we must come up with a plan for showing that our graduating teachers can actually impact student learning.

Standard 5 Group Progress Report

Dr. Beard handed out a progress report for this team that included the following points:

5.1 narrative created outlining institutional processes and that various data sets were added to demonstrate how we measure quality and performance
5.5 Narrative created outlining use of data to determine how we qualify faculty and improve faculty and other stakeholders in quality improvements and revision of the curriculum.

It also outlined the times the team had met and plans to meet before the end of the semester to discuss the remaining points and that they had added more evidence to the SAKAI folders.

**Announcements:**
- PEUC/CAEP Work Group Meeting Wednesday, November 30, 3-5 p.m.
- Sign up for Education Relay for Life Team by going to [http://main.acsevents.org/site/TR/RelayForLife/RFLCY17SA?pg=entry&fr_id=83527](http://main.acsevents.org/site/TR/RelayForLife/RFLCY17SA?pg=entry&fr_id=83527)
  - click on “Join this Relay” Create an Account Join Kappa Delta Pi Future Educators (Team Name Will be Changing—watch for the name voting on the Knutti Bulletin Board coming soon)
  - And make a $10 donation

**Future Reports/Considerations:**
- Practicum Manual Revision— Helen Baker, lynne hannah, Dawn Burke, Peg Swisher, LeAnn Johnson
- Catalog Listing Location for Endorsements –Move to include under education rather than in respective departments?
- University Wide Tracking of Completers – Scott Beard

Submitted by LeAnn Johnson

The following outline for the Scheduled Teacher Education Fair to be held on March 2, 2017 was developed with a committee of teacher candidates.

**Proposed Education Fair--Outreach to Potential Future Teacher Candidates**
**Thursday, March 2, 2017**

7:30 – 8:00 Meet in Lobby of EOB Light Breakfast foods (Donuts or other pastry, tangelos, OJ)
  - Dr. Hicks—is there any kind of budget available to provide some light food for this meet and greet time?

8:00-8:45 A Day in the Life of a Teacher Candidate in Common Area of Turner Residence Hall
Presentation done by a secondary, elementary and early education candidate as to how the college day for a teacher candidate differs from that of a high school student or for other college students in general.

9:45-9:05 KDP members assigned to small groups to escort to Knutti
9:10-10:00 Proposed attendance in first half of Dawne Burke’s EDUC 320 class
   - Need to talk to Dawne
   - Need to consider space requirements for class + visitors
   - May need to recruit a second faculty member to run a second section of the class which can be split with half of class and half of visitors attending in each room.

10:00-10:50 Screening of an Education Based Video or Webinar
   - Perhaps TEACH documentary although it is much longer than this time slot would allow

11:00-12:15 Proposed attendance in BB. Mitchell’s EDUC 360 class
   - Need to talk to BB
   - Need to consider space requirements as before

12:30 Lunch at Dining Hall with Teacher Candidates
   - Have sign up form include indication of buying lunch $6.50 or brown bag
   - Ask dining hall for permission to have brown baggers eat with us
   - Reserve Lower level dining room for Lunch Seminar

1:15-1:40 Tips for Success in Lower Level Dining Hall
   - Group of Education students talk about importance of writing and math skills, GPA, testing, persisting when encountering frustrations, and time management.

1:50-3:05 Proposed attendance with Tauna Cole’s EDUC 200
   - Need to talk to Tauna
   - Need to consider space requirements as before

3:05-3:30 Subject Area Conversations
   - Break visitors up by subject area of interest to talk in small group with major and advisor for subject areas.

3:30 – 5:00 Student Center Bowling/Billiards and hang out
   - Need snacks – Talk to Dr. Hicks about possible funds to pay for it
Have a take home for each participant
  Can admissions give us some things to give away?
  Katelyn will see about soliciting some donations to have DOE/Shepherd T-shirts made up to give each participant.

Need some kind of sign up/participation form
Aim for 20 participants—if we get more than 25 need to reconsider how to handle numbers and how to cap it.

Results of Education Fair Held March 2, 2017

Education Fair Evaluations
March 2, 2017

31 High Schoolers Registered, 29 Attended with 1 Teacher
Anticipated College Start: 11 Fall 2017, 17 Fall 2018, 2 2019, 2 2020
Specializations: Social Studies, Physical Education, English Language Arts, Early Education, Elementary Education, Biology, Spanish, Art

On a scale of 1 to 5 (5 being best)
· Meet and Greet 3.41
· Residence life 2.95
· A Day in the Life of a Teacher Candidate 3.91
· Sitting in on 4 different Classes 3.9
· TED Talk/Poster Making 4.73
· Lunch/Tips for College Success 4.5
· Specialty Focus Groups 4.74
· Game Zone Hang Out 4.55

Desire to Become a Teacher
· More: 9/21 = 43%
· Same: 12/21 = 57%
· Less: 0/32 = 0
Desire to Come to Shepherd
More 10/21 = 48%
Same 11/21=52%
Less 0/32=0

Best Part of the Experience?
- 5 Chat and Chew Lunch
- 1 Interacting with Different People
- 1 Meet the Professors
- 2 ELL Class with Dr. Allison
- 2 TED Talk/Poster Session
- 2 Attachment Theory with Dr. Burke
- 1 Foundations Student Presentations
- 2 See What a Class is Like
- 1 Learning Things I didn't already know
- 2 Specialty Groups
- 1 Dorms
- 1 The Whole Thing

What did you Learn?
- 4 How Field Works
- 4 How much work college is
- 1 Importance of Interacting With Your Students
- Teaching is more than curriculum. You must be personal, friendly and willing to go outside the box
- 1 Small Class Sizes/Good
- 1 Praxis Testing
- 1 Living on Campus
- 1 There's so much more to do to become a teacher
- 2 Being an Educator rather than a teacher
- 1 I Learned a Lot

Other Comments:
I enjoyed everything that I learned from students and teachers.
I really enjoyed my experience at Shepherd University. I had a great time with the activities. The students that toured us today were great.
I don’t like the dorms but I want to stay on campus.
I really liked all the teachers.
I had a lot of fun. This reassured my thoughts on being a teacher.
I really enjoyed getting to come and meet teachers and Students and sit in on classes. It was a really great experience.

Community College Recruitment Efforts Through Advising Pathways

The following document shows the work done with Potomac State College to establish a viable advising pathway for elementary students who are interested in transferring to Shepherd.

PSC to SU Course Alignment:
Elementary Education (AA at PSC)

NOTE: The use of “track elective” below will require the student to select courses within an approved list specific to the particular transfer institution. Students will see the list of Shepherd courses along with WVU and Frostburg courses. The WVU and Frostburg lists have been eliminated in the document below, but the “track elective” language remains to show the location of the course options within the program and to differentiate which are gen ed requirements.

<table>
<thead>
<tr>
<th>Course Number/Name</th>
<th>If “Track Elective,” Specific PSC Course to be Taken by SU Bound Students</th>
<th>GEFs (Gen Ed)</th>
<th>Cr.</th>
<th>SU Course</th>
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<td>ENGL 101 Composition and Rhetoric</td>
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<td>EDUC 100 Education Colloquium</td>
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<td><strong>A. GEF Elective 4: Society and Connections</strong></td>
<td>COMM 104 OR CSAD 270</td>
<td>4</td>
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<tr>
<td>BIOL 101 General Biology</td>
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<td>BIOL 103 General Biology Laboratory</td>
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<td>HIST 152 Growth of the American Nation to 1865</td>
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<td>WVUe 191 First-Year Experience</td>
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<td>PSYC 241 Human Development</td>
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<tr>
<td><em><em>B. Track Elective</em> Lab Science</em>*</td>
<td>PHYS 105</td>
<td>4 4 GSCI 103</td>
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<td>MATH 126 College Algebra</td>
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<tr>
<td><em><em>C. Track Elective</em> Fine Arts</em>*</td>
<td>MUSC 111</td>
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**Second Year, First Semester**

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<tr>
<td><em><em>D. Track Elective</em> English Literature Elective</em>*</td>
<td>ENGL 241 (AMER 1)</td>
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<td>ENGL 242 (AMER 2)</td>
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<td><strong>E. GEF 7 Elective: Global Studies and Diversity Track Elective</strong></td>
<td>HIST 179</td>
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<td>OR</td>
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<td></td>
<td>HIST 180</td>
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<tr>
<td><em><em>F. Track Elective</em> Lab Science</em>*</td>
<td>CHEM 111</td>
<td>4 CHEM 111</td>
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<tr>
<td><strong>G. GEF 8 Elective: Focus Track Elective</strong></td>
<td>POLS 102</td>
<td>8 3 PSCI 101</td>
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<tr>
<td><strong>H. Track Elective</strong></td>
<td>EDUC 150 (Take On Line at SU)</td>
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**Second Semester**

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<tr>
<td>HIST 153 Making of Modern America: 1865 to the Present</td>
<td>8 3 HIST 202</td>
<td>TIER II (if student did not take ENGL 241 or 242 in previous semester)</td>
</tr>
<tr>
<td><strong>I. Track Elective</strong></td>
<td>HIST 250</td>
<td>3 HIST 309</td>
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<tr>
<td><strong>J. Track Elective</strong></td>
<td>GEOG 108</td>
<td>3 GEOG 105</td>
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<tr>
<td>Elective (PE FOR EDUCATION COURSES-TBD)</td>
<td>TBD BASED ON SYLLABI SENT</td>
<td>3 HLTH 310 OR OTHER?</td>
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**Blue Ridge Collaborative Agreement Update Adding 2 new Specializations**

The following tables show the course progression and articulated courses for two new areas of certification added to the Blue Ridge Collaborative Agreement. This agreement is not a 2 + 2 program but allows students to juncture through the PEUC during their final
semester at BRCTC in order to provide a seamless transfer and graduation in 4 years.
NOYCE Grant

PROJECT DESCRIPTION
Scholarships for Teachers in Appalachian Regions in STEM fields (STARS-WV) at Shepherd University (SU) is a Track I Robert Noyce Teacher Scholarship Phase I Program that will support the recruitment, retention and completion of an accelerated pathway to BS STEM + Master of Arts in Teaching (MAT) + teacher certification. This will be achieved through a collaborative effort by SU, Blue Ridge Community and Technical College (BRCTC), Lord Fairfax Community College (LFCC) and the West Virginia Regional Education Service Agencies (RESA) 8. The STARS-WV program will provide scholarships, unique programmic support and mentoring for 24 SU STEM graduates to become highly trained and effective teachers in high need schools of WV and surrounding Appalachian regions. The program includes a targeted undergraduate STEM curriculum that requires students to combine their content knowledge with the knowledge of societal issues of Appalachian regions in a research-based activity or project, leading to an undergraduate degree in STEM field. The STARS-WV program follows the undergraduate coursework with a graduate curriculum that includes extensive training in the societal issues specific to Appalachian regions with a focus on content-based pedagogical training best suited for those issues. The program provides frequent and early pre-service experiences that support the ultimate goal of producing highly qualified STEM teachers. The formation of cohorts and close mentoring of the participants supports our retention initiatives. The overarching goal of the program is to create a sustainable teacher-training program that produces highly-qualified STEM teacher/scholars who can create learning environments in Appalachian high need schools that will in turn encourage their students to pursue STEM majors and careers. Our expectation is that this accelerated pathway will, at a minimum, double the number of highly trained SU STEM teachers in surrounding Appalachian regions.

The STARS-WV program will:

1) **Recruit freshmen and sophomore students enrolled in introductory STEM classes and encourage them to become certified 5-12 STEM teachers.** Recruitment efforts will target freshmen and sophomore students enrolled in STEM fields at SU and 2-year colleges within Appalachia with which SU has a transfer matriculation agreement. Collaboratively we will employ proven recruitment strategies that target women, minorities and other under-represented groups for purposes of creating a candidate pool of highly trained 5-12 STEM teachers. STARS-WV will provide 3 years of financial support in the form of scholarship during the students’ junior and senior years while pursuing a STEM degree as well as the 5th year needed to acquire the MAT degree with teaching certification. Ultimately, we will graduate 24 dedicated and highly-prepared STEM teachers for high need, rural communities.

2) **Provide education curricula that reflect a societal based approach and content knowledge pedagogy.** The Appalachian Studies Program at SU
critically examines this region through a series of interrelated courses all dedicated to a richer and fuller understanding of the region, its language, its lore, its history, and its cultural traditions. Two courses within the MAT component of the program will uniquely prepare the STARS-WV teachers for high need areas in the surrounding Appalachian region. The education department in concert with our expert of faculty in the Graduate Certificate Program in Appalachian Studies has crafted a program that will uniquely prepare the STARS-WV teachers in terms of the educational needs, the classroom environment, and the challenges and opportunities that living and teaching in the Appalachian region can bring.

3) Provide targeted STEM courses to inculcate the societal concerns and needs of Appalachia. During the senior year at SU, two of the undergraduate STEM major courses have been redesigned for the STARS-WV participants. At least one course requires a significant research or project component that requires the student to consider a topic that reflects their deeper understanding of societal concerns for rural communities found in WV. The research/project will be collaboratively advised by STEM faculty, education faculty, and experts in STEM fields currently employed in Appalachian regions, as appropriate.

4) Provide a supportive program of pre-service experiences, mentoring, and professional development. Pre-service experiences during the first year of scholarship support will introduce the candidates to the field of education. Close mentoring by both STEM and education faculty will ensure the development of sound pedagogical skills needed to teach STEM content effectively in rural schools. Participants will assist in the designing and conducting of pre-service learning exercises and assessment. Participants will also develop a deep understanding of Appalachian society and the challenges of teaching 5-12 STEM subjects through carefully constructed cohort activities including an Appalachian retreat experience. STARS-WV students will have the opportunity to participate in research and professional development activities as well as opportunities to present research.

5) Evaluate the effectiveness of the recruitment, retention, mentoring, and course realignment strategies; and disseminate the results. All aspects of the program will be evaluated by an independent expert in order to determine the effectiveness of strategies to recruit and retain STEM majors and to provide systemic support and professional development beyond graduation and into the teaching career. STARS-WV students’ attitudes towards science and math will be evaluated before and after completion of the program. Data regarding participation, course grades, CASE and Praxis II scores, student teaching evaluations, practicum evaluations and portfolio entries will be used to assess their pedagogical content knowledge and teaching dispositions. Data regarding teaching effectiveness will be collected and analyzed.

The following expected outcomes will occur as a direct result of this program:

1) 24 highly motivated and academically talented STEM majors will be recruited and complete a STEM bachelor’s degree and a Master of Arts in Teaching with recommendations for teaching certification;
2) these exceptionally well-prepared graduates will teach in a STEM 5-12 discipline in a high-need school district in WV or surrounding Appalachian region and will be leaders within their respectively educational communities;
3) these teachers will positively impact approximately 15,000 students (average 22 students per class, 5 classes per year for a total of 6 years) who will, compared to state norms, have a better knowledge of STEM fields in particular as it relates to issues in WV;
4) other educational institutions will have access to the enhanced curriculum and its effectiveness;
5) the infrastructure established by this grant will have a continuing significant impact. SU is committed to making implementation of this accelerated pathway a central institutional focus. SU will institutionalize a BS STEM + MAT pathway that is specifically designed to produce outstanding STEM teachers to serve high need, rural communities.

Review of Relevant Literature

K-12 educational institutions are not supplying enough students who have mastered the foundational curriculum tied to science and mathematics. For
those who meet the academic achievement benchmarks, many show no interest in STEM-related fields. This lack of an adequate supply of STEM students is fueling a declining enrollment in higher education STEM-fields and has become a major barrier to the economic health of the US (Chen & Weko, 2009). From 2003 to 2009, only 28% of bachelor’s degree students and 20% of associate’s degree students entered STEM fields.

Compounding the low-enrollment trend is the lack of persistence in STEM fields. Among these students, only 52% of bachelor’s degree students and 31% of associate’s degree students persist to STEM degree completion within 6 years. Most of those who do not persist changed to a non-STEM field (Chen, 2014; Chen & Ho, 2012). Students leave STEM fields most frequently at the freshmen introductory course level for various reasons, but predominantly cited are 1) poor academic performance; 2) self-efficacy and interest; and 3) work environment (National Academy of Science, 2009; Le et al, 2014).

During the period from 2010 to 2014 the percentages of students leaving STEM majors at SU during their first two years was Biology -2.9%; Chemistry -10.3%; Environmental Studies/Physical Science -17.1% and Mathematics -36.1%. Academic preparedness and low grades are believed to be strongest motivators for attrition.

Providing a robust pipeline of STEM students who persist until graduation has become a national priority. To attain this goal, some policymakers have targeted reducing STEM attrition in colleges (PCAST, 2012). Teaching within social context has been shown to improve interest and confidence in STEM subjects particularly for students from under-represented groups in STEM (Westen, Seymour & Thiry, 2006). One of the main underpinnings of the STARS-WV program is that it recognizes the importance of teaching with the social context.

The region called Appalachia encompasses a geographic area that stretches from New York to Alabama. It is composed of parts of thirteen states; however, West Virginia is the only state that is located completely within this geographic region. The West Virginia public school system (Pre-kindergarten through grade 12) operates within districts governed by locally elected school boards and superintendents. In 2013, West Virginia had 283,044 students enrolled in a total of 755 schools in 57 school districts (http://zoomwv.k12.wv.us/Dashboard/portalHome.jsp).

Towns and rural communities are defined by the U.S. Bureau of the Census as any incorporated place, or non-place territory that has a population of less than 100,000. In 2013, about 27% of all U.S. public school students in the country attended town or rural schools compared to 66% in WV; of which about 50% are considered Title 1 schools (NCES 2013).

Rural students are different than those in larger communities. Overall, only 16.8% of rural parents have 2 years or more of post-secondary education compared to 27.5% for suburban and 24.3% in urban areas. Rural students are much less likely to attend college (Smith et al, 1995). The most current successful national career path trends are not inherent in their cultures (Israel et al, 2001) and often not part of their aspirations (Burnell, 2003). They are less likely to take advanced math courses in high school (Cogan et al, 2001).

Rural classrooms are different than those in larger communities. Features such as mandated testing, available textbooks, inadequate funding, and even the expectations and experiences of rural parents influence what happens in classrooms in rural schools (Campbell & Silver, 1999; Schultz, 2002). Equally important are policies regarding teacher education, licensing, and professional development. It is well documented that these policies make an important difference in the qualifications and capacities that teachers bring to their work (Darling-Hammond, 2000).

Understanding these differences is an important component in training teachers of the STARS-WV program. The participants will learn to capitalize on the opportunities these differences present and to not view them as inherent obstacles to overcome. The STARS-WV program will connect the expertise of STEM graduates with master level content knowledge pedagogical methodologies used in excellent teaching. This includes targeted, socially connected instruction within the STEM discipline to help participants better understand the communities that they will be working with. The program identifies and provides training in content-based pedagogies that will enable these STEM teachers to provide appropriate, pedagogically-based instruction in STEM fields in these rural schools.
In general, K-12 educational institutions are not supplying enough students who have mastered the foundational curriculum tied to science and mathematics. In West Virginia, the need to improve student performance in STEM fields is urgent.

The West Virginia Elementary and Secondary Education Act (ESEA) is an accountability system created by West Virginia education experts for West Virginia students. This system more effectively identifies struggling schools. From 2012 to 2013, just over 28% of WV schools met both student performance and growth expectations and earned a “Success” designation. In the executive summary produced by ESEA the most noted areas of concern were: 1) a decrease in the number of students who met the proficiency mark on the WESTEST 2 (WESTEST content assessments measure a student’s levels of performance on standards, objectives and skills); 2) data indicates that West Virginia students are not closing the gap fast enough to meet national expectations; and 3) overall, only 46% of students were proficient in math. Of the students who did not meet proficiency rates in math, 73% showed no academic improvement. In particular, grades 5-12 student performance in math lags far behind national standards. According to the 2005 NAEP report on 8th grade mathematics, the percentage of students in WV at or above the Basic proficiency level was 60%. This represents a ranking of 43rd out of 50 states.

Low student performance is further aggravated by the lack of fully credentialed STEM teachers in West Virginia. Attracting and retaining certified teachers was identified as a concern in the State Superintendent’s Report (2014) which noted a high number of schools started the school year with substitute teachers and teachers who were teaching on a permit. SU is located in Jefferson County West Virginia. We are geographically close to Berkeley and Morgan counties where the vast majority of our students will student teach and eventually teach. Out of 55 counties that reported, the ranks of Berkeley, Jefferson, and Morgan counties for percentage of highly qualified teachers are 43rd, 40th, and 30th respectively. A closer inspection shows that in 2014 in Berkeley County only 27% math, 31% science teachers are ranked highly qualified due to “Academic Major or Advanced Credentialing” (AMAC) with 55% having less than 10 years’ experience. Jefferson County reported only 30% of math, 31% science teachers are ranked highly qualified due to AMAC with 53% having less than 10 years’ experience. (http://zoomwv.k12.wv.us/Dashboard/portalHome.jsp). As of June 15th, 2016 the “Critical Needs Listing” for Berkeley and Jefferson counties included all of the STEM fields: Biology, Chemistry, Physics, General Science, and Mathematics (http://wvde.state.wv.us/forms/critical-needs/view.php?cert=23). Not surprising, overall school performance in these counties lags behind. Two of the 15 lowest performing schools are high schools from Jefferson and Morgan Counties. The most frequently identified non-compliances of low performing schools are listed with percentage cited in parentheses: Achievement (100.00%); Lesson plans (73.33%); Instructional Strategies (66.67%) High Expectations (60.00%); and Licensure (26.67%), (Commonalities in Low Performing Schools: Trend Education Performance Audit Findings 2006-2007). These non-compliances demonstrate how important the programs regarding teacher education, licensing, and professional development are to student development and efficacy.

High need schools are also identified as a high percentage of individuals from families with incomes below the poverty line. In 2013, WV reported 27% of all school aged children living at or below the poverty level. Only 4 states nationwide reported higher percentages (http://datacenter.kidscount.org). Approximately half of all students in Jefferson, Berkeley, and Morgan counties are currently eligible for free or reduced lunch (http://zoomwv.k12.wv.us).

This evidence overwhelmingly demonstrates the critical need for programs that recruit and train 5-12 STEM teachers for WV, especially those geographically close to SU in Regional Education Service Agencies (RESA) 8. These teachers need to be well prepared on how to teach STEM courses and they need to understand the challenges and opportunities of teaching in these rural locations in order to best serve the community and become change agents in the educational cycle. Thus, we propose the following specific activities with rationales, expected outcomes and assessment of each of the objectives above.
The STARS-WV Project Description.
The program objectives detailed below follow an abbreviated outline of the project description proposed in NSF 16-559. The STARS-WV scholarship program will use proven recruitment and retention strategies aimed at under-represented populations. The program provides targeted instruction within the STEM discipline to help participants better understand the communities that they will be working with. It identifies and provides training in content-based pedagogies that will enable these STEM teachers to provide appropriate, pedagogically-based instruction in STEM fields. The administrative team will employ specific intervention methods that keep students not only interested in STEM, but learning how to teach and excel in STEM fields. We will evaluate and disseminate the results of our program. Ultimately, our goal is to produce 24 exceptionally well-trained STEM teachers for high need regions in Appalachia and a unique, highly effective teacher training program specifically designed to support rural communities.

i. The number and size of scholarships.
There exists an urgent need for the scholarship program Shepherd University is herein proposing, and SU is well positioned to address these needs. We are a small university with about 3,700 undergraduate students. Of these, approximately 625 are currently enrolled in science disciplines, mathematics, engineering, and computer science. Fall 2015 enrollment statistics for first time incoming freshman were: ACT composite 22; SAT composite 990; and high school GPA 3.31. Thus, we have a robust pool of potential applicants. A recent survey conducted by SU in anticipation of preparing this grant found a strong interest among our STEM undergraduate students for this type of program. Out of 137 respondents, 20% reported that they have ‘definitely’ or ‘very much’ considered a K-12 teaching career, 5% are already planning to obtain a BA in teaching, 34% were ‘very to definitely interested’ in a scholarship program that required two years of teaching service for every year of support, and 28% were ‘very to definitely interested’ in a four-year B.S. degree with teaching certification. Lastly, 36% were ‘very to definitely interested’ in obtaining teaching certification. Thus, there exists a strong interest in teaching as a career option for our STEM undergraduates.

Our secondary teacher certification program is steadily enrolled with many of these students expressing an interest in a major in the STEM content in addition to certification. From 2011 to 2016 the number of certified Secondary Education teachers in STEM fields graduating from SU has been 8 (in 2011), 5, 7, 7, 11 (unusual), and 2 (in 2016). A ten-year average of approximately 4 students per year is highly representative of this program.

The estimated cost for 9 month attendance at SU ranges from $8,596 (net in state undergraduate) to $18,266 (out of state graduate). The vast majority of our undergraduate student body is categorized as in-state and is considered financially needy.

Based upon these data, we request financial support for 24 scholars. This will double our STEM teacher program and be highly sustainable for our current size and demonstrated level of interest. Each scholar will receive $10,000 per year over a 3 year period of time for a total of 72 scholarships over the duration of the 5 year grant period. The total request for STARS-WV participant scholarships is $720,000. With a total requested direct cost amount of $882,793, the proposed project allocates over 80% of total requested direct costs to participant scholarships.

ii. Academic and other components of the teacher preparation program.
The Master of Arts in Teaching (MAT) degree at SU is a 39-credit hour program designed to provide initial teacher certification for those with bachelor’s degrees in selected non-teacher education fields. STARS-WV participants will choose the secondary track that supports certification in mathematics (5-12), general science (5-12), biology (9-12), or chemistry (9-12). Students first complete 33 credit hours (11 courses) of classes: EDUC 500 - Advancing the Use of Technology in the Classroom, EDUC 503 - Reading in the Content Area, EDUC 525 - Collaborative Methods in the Inclusive Classroom, EDUC 560 - Survey of Exceptionalities, EDUC 581 - Social Foundations of American Education, EDUC 582 - Learning in Contexts, EDUC 583 - Planning, Conducting, and Assessing Instruction, EDUC 584 - Classroom Ecology, EDUC 585 - Content Pedagogy and two STEM electives. Five of these courses include extensive field components, approximately 25-30 hours per course, for a total of at least 125 hours. These field experiences provide students with the opportunity
for real-world observation and hands-on experience with topics and techniques learned in the university courses. Four of these courses place students with an experienced, highly-qualified STEM instructor in public schools, where they observe, reflect, design and/or teach several lessons, and in general participate in the life of the classroom. One course includes a field experience at Job Corps, a federal education and training program that helps young people who have struggled in public schools to learn a trade, earn a high school diploma or GED, and find and keep a good job. During this field experience, SU students have the opportunity to tutor individuals and small groups of students.

An important component of the STARS-WV MAT experience is the expansion of two existing courses (EDUC 581 and EDUC 582) that will uniquely prepare the STARS-WV teachers for living and teaching in Appalachia. The education department, in concert with expert faculty in the Appalachian Studies Program, created EDUC 581 Social Foundations of American Education and EDUC 582 Learning in Contexts to 1) uniquely prepare our teachers in terms of the educational needs, the classroom environment, and the challenges and opportunities that teaching in Appalachian regions can bring, and 2) train the teacher candidates about specific content knowledge pedagogical methods.

Research suggests that rural students and classrooms are distinctly different than their suburban or city counter-parts, and thus training STEM teachers for rural communities should positively reflect those differences (Campbell & Silver, 1999; Schultz, 2002). Our STARS-WV STEM teacher training honors place; that is, understanding and respecting the particularities of the land, communities, families, and history of our region. Next, it posits that the sustainability of rural communities should be an important goal. Our training does not yield to generic practices which may not be well-suited to a uniquely deficient setting. And thus, our STARS-WV training is progressive in that we embrace an alternative direction for STEM teacher training specific to the needs of Appalachia. The course descriptions for EDUC 581 and EDUC 582 are shown here.

**EDUC 581 - Social Foundations of American Education.** This foundational course will engage students in the critical examination of the psychosocial and sociopolitical relationships among schooling, educational policy, and leadership in the U.S. Special emphasis will be given to the history and challenges of public education in Appalachia. Elements regarding the origin, purposes, underlying philosophical assumptions, cultural contexts, and implications for schooling will be examined through research, analytical inquiry, critical thinking, and reflective dialogue.

**EDUC 582 - Learning in Contexts.** This course provides the opportunity for reflective inquiry into the nature of knowing. Learners actively and with determination construct an understanding of their world. This course delves into the social and psychological conditions that shape learners, as well as the conditions that teachers can create to maximize learners’ development into empowered human beings who can live fruitfully in a democratic society. In particular, the challenges of providing a 21st-century education within the context of Appalachian inequities, cultural characteristics, and traditions will be examined.

EDUC 581 and 582 are specifically designed to 1) develop an understanding of the geographic region known as Appalachia through the study of its cultural traditions and the ethnic heritage of those diverse people who call themselves Appalachians; 2) develop an understanding of the political, social, and economic forces that shape the region; 3) develop an understanding of the geography and environment of Appalachia; 4) develop an understanding and appreciation of the literature, music, art, folk and recreational traditions of the region; and 5) develop through service and experiential learning an appreciation for the Appalachian region and its citizens.

EDUC 581 and 582 are to be completed during the junior year or in the first year of the STARS-WV program participation. The rationale is that providing students with socially constructed content and information about teaching opportunities will help them to value the STEM knowledge and persist to degree completion. At this juncture the students will officially be participants in the STAR-WV program and receiving financial support and thus we will require them to commit to the educational training. During their senior year, STARS-WV undergraduate students will complete six more credits hours in the MAT program and complete the undergraduate STEM capstone or research experience unique to STARS-WV participants. See section vi of the grant
for more information about the STEM capstone courses.

The STARS-WV participants will have several early teaching opportunities throughout the program. Five of the MAT courses include extensive field components, approximately 25-30 hours per course, for a total of at least 125 hours. Four of the MAT courses place students with an experienced, highly-qualified STEM instructor in public schools, where they will observe, reflect, design and/or teach several lessons, and in general participate in the life of the classroom. A fifth course includes a field experience at Job Corps, a federal education and training program that helps young people who have struggled in public schools to earn a high school diploma or GED.

Following successful completion of the MAT courses, students will undertake a six credit hour full-time student teaching internship where they will spend 15 weeks in a public school classroom. This in-depth clinical experience in the public school system provides the opportunity to plan, teach, and manage a classroom under the supervision PI or Co-PI’s of this program.

This program combines the best elements of our STEM, Education and Appalachian Studies programs to create new curricula that support the creation of highly trained STEM teachers.

**iii. Recruitment activities and marketing strategies.**

Recruitment into the STEM pipeline is a critical component of the proposal. Targeted recruitment strategies will focus on academically prepared freshman and sophomores at SU, BRCTC and LFCC with whom SU already has matriculation agreements and a strong transfer pipeline. Our collaborators are Dr. R. Craig Miller, Professor, Vice President of Professional Studies and University Transfer (BRCTC) and Dr. James Shaw, Dean of Science, Engineering, Math and Health (LFCC). Statements of support and intended collaboration from BRCTC and LFCC are included in this grant submission.

Economic and social barriers suppress the participation of women and minorities in STEM. Successful recruitment efforts include financial assistance in order to remove economic barriers to participation (Allison, 2007). Occupations are gender-stereotyped as well, with STEM fields generally typed as masculine. To overcome these stereotypes, research suggests that advisors and mentors provide not only career information but also provide students with training on the factors and processes involved in both choosing a career and reaching their goals (Adya & Kaiser, 2005).

We anticipate recruiting students over the period January 2017 through August 2019 for a total of 24 STARS-WV participants. Our recruitment efforts will include a focus on closing both the economic and social barriers to recruiting women and minorities into STEM. Upon notice of the award, we will aggressively announce the program by creating a STARS-WV brochure; sending emails to freshmen and sophomores, appropriate pre-teaching list-servs and campus clubs; placing article(s) in the college newspapers and other publications; and creating a STARS-WV link on the SU, BRCTC and LFCC official college website that contains information, application forms, and eventually results of the program. William Sommers, Vice President of Enrollment Management at SU has agreed to be our collaborator on this component. Members of the STARS-WV administration will host four informational sessions (Spring 2017, Fall 2017, Spring 2018 and Fall 2018) that will be advertised and conducted on all participating campuses. These one hour, open sessions will provide information about the STARS-WV program, the application process, the program expectations, and teaching STEM as a career. The dates will coincide with the beginning of student advising and course scheduling. We will include educational personnel from Jefferson and Berkeley counties at these information sessions.

The STARS-WV recruitment program will be structured into three cohort groups of steadily increasing size. Cohort 1 will have 6 participants who will start their junior year at SU beginning in the fall of 2017. Cohort 2 will have 8 participants who will start their junior year at SU beginning in the fall of 2018. Cohort 3 will have 10 participants who will start their junior year at SU beginning in the fall of 2019; for a total of 24 participants over the 5 year duration.
In the first year we believe that our current pool of undergraduate STEM students will provide most of the 6 students that will constitute the first cohort group. SU is a relatively small university and students in STEM fields often form very close alliances with their peers. We believe our strongest program voice will be our STARS-WV Ambassadors. The STARS-WV Ambassadors will work with the PI to positively spread the opportunities and experiences of STARS-WV to their peers here at SU. Minimally, we will request their presence at open house events at SU, LFCC, and BRCTC, and first year STEM course presentations of the program. As a result, we expect the interest in the program to grow to 8 students in cohort 2 and 10 students in cohort 3; for a total of 24 STARS-WV participants. This more than doubles our STEM teacher numbers and we fully expect this number to continue to grow and sustain beyond the grant. The tiered program also allows us to modify our recruitment techniques if needed, in particular we may consider recruiting from more remote locations.

Introductory STEM classes at SU, BRCTC and LFCC will be targeted for recruitment. Members of the administrative team along with STARS Ambassadors will present an overview of the STARS-WV program. The courses at SU include the First Year Experiences: FYEX 101, BIOL 150, ENVS 101, and MATH 101. Equivalent freshman courses will be identified by BRCTC and LFCC. In addition, we will administer a career dispositions survey to all introductory biology, chemistry, mathematics, physics and related STEM courses during recruitment years. If the interest is sufficient, a member of the administrative team will visit to discuss the STARS-WV program. Instructors of these courses have agreed to allot time for this presentation. Members of the administrative team and STARS Ambassadors will also be present at SU open house forums and at freshman and transfer orientations.

iv. The selection process.
Scholarship recipients must be U.S. citizens or nationals, or permanent resident aliens. Scholars must be undergraduate student who have attained at least junior status in a STEM baccalaureate degree program. Applicants will provide transcripts, a reference letter from a STEM faculty member, and complete an application essay describing why they want to teach, their philosophy of teaching, and their willingness to fulfill the commitment to teach in a high need Appalachian school. Completed applications will be reviewed by the STARS-WV administration team.

Admittance selection will be based upon academic performance, particularly in STEM courses, aptitude for teaching, and willingness to fulfill the teaching commitment of two years for each year of scholarship support. Successful applicants must have an overall GPA of at least 2.8. We will consider financial need and creating a diverse cohort group in that order if the number of academically qualified applicants exceeds the number of scholarships. Recipients will be required to sign a commitment of teaching and a statement that they will remain compliant with and fully participate in the proposal activities including surveys and an agreement to provide annual certification of employment and current contact information. Annual scholarships are budgeted at $10,000 per year per awardee, however at no time can scholarship support exceed the cost of annual attendance for three years per recipient. We expect all 24 recipients to complete one year as graduate students. Scholarships may be split into 2 awards (fall/spring) with the remaining balance for summer.

Upon acceptance into the STARS-WV scholarship program, recipients will be required to sign a commitment of teaching and a statement that they will remain compliant with and fully participate in the proposal activities including surveys and an agreement to provide annual certification of employment and current contact information.

For each full-year of a scholarship award received, scholarship recipients are required to complete two years of service as a STEM teacher in a high-need local educational agency, with a maximum service requirement of six years. This teaching service commitment must be completed within eight years after graduation from the program for which the scholarship was awarded.

v. The management and administrative structure.
In the Spring of 2016, SU inaugurated our 16th president, Dr. Mary J.C. Hendrix, a noted Shepherd alumna (1974) and award winning scientist. Dr.
Hendrix is a leading scientist in cancer research with over 250 publications and seven patents in the field. Dr. Hendrix is currently on the Board of Directors at the Annenberg Center for Health Sciences; she chairs the National Disease Research Interchange board; and she serves on the Board of Directors for Research!America, based in Washington, D.C.. Dr. Hendrix is a strong supporter of our STEM programs and clearly understands and supports the need to educate the next generation of STEM leaders. A letter of support is included in this proposal.

The STARS-WV administrative team includes faculty with expertise in mentoring and advising students in both STEM content and education. Dr. Karen Adams (Shepherd College class of 1989, Mathematics) is the proposal PI. Dr. Adams is an Assistant Professor of Mathematics and the Math Certification Specialist at SU. From 2004-2009 Dr. Adams was the PI on NSF S-STEMS Award #0422340 (Formerly CSEMS). The project entitled Scholarships to Enhance Mathematics Learning and Research at Wilson College (a women’s institution at that time) tripled the enrollment in mathematics. Dr. Adams has supervised student teachers for 10 years, serves on SU’s Professional Education Unit Council (PEUC), and is the mathematics SPA writer. The Co-PI’s are Dr. Ruth Conley (Associate Professor of Biology) and Dr. Georgiann Toole (Associate Professor of Education). Dr. Conley is the content supervisor for Science Education students. She serves on PEUC and is the SU Science SPA writer. Dr. Toole is the director of the graduate teaching certification programs including the MAT program, supervises student teachers, is a member of PEUC, a SPA writer, and has experience as the Chair of the Department of Education at SU. The administrative team is composed of curriculum experts, highly experienced teachers, and supervisors of student teachers. All have expertise in mentoring, advising, and supervising teaching experiences for students in both STEM and education majors.

vi. A genuine collaboration between faculty in STEM and education.

SU understands that highly effective teachers have an understanding of the process of science through hands-on research experiences (Dubner, 2005). Such research experiences translate science into a logical process of thinking and exploring in the classroom that can provide a sense of context and relevancy. Teachers with science research experiences have a greater technical expertise and higher skill for incorporating math and technology into their science teaching. They are more familiar with inquiry-lead and standards-based science classes and laboratories and their students achieve higher academic success (Silverstein et al, 2009; Hanegan et al, 2010).

SU is well positioned to support the laboratory experience necessary to become highly effective STEM teachers. SU can offer STARS-WV participants research experiences in our laboratories. Additionally, we are within a 30 mile radius of major research centers: US Geological Survey (Leetown Science Center), the National Center for Cool and Cold Water Aquaculture, the Appalachian Fruit Tree Research Laboratory, the Army Medical Research Center, the National Institute of Health, and the National Cancer Institute.

As part of the Core Curriculum Requirements at SU, all students complete one or more capstone courses and an intensive writing experience within their respective major or program. In the STEM majors, all capstone courses involve reading primary literature, writing a literature review and presenting to faculty and students in their department. Some students also complete a research internship where they utilize their primary literature review as background to conduct scientific research based on a hypothesis, including data collection and analysis.

STARS-WV participants will complete at least six credits of upper-level STEM coursework at the graduate level. A minimum of three of the six credits will satisfy the capstone research requirement for the BS degree. These 6 credits will also satisfy general elective credits within the MAT program. These courses will include a significant research project or component that requires the STARS-WV participant to apply the course content to Appalachian heritage or resources. STARS-WV participants will work with their primary adviser and their STARS-WV adviser to ensure curriculum requirements are met for both the BS and MAT programs.

The ability to apply science content to the Appalachian region will allow the future teachers to make science relevant and give appropriate scientific context to their lessons plans and laboratory exercises. Rural schools typically offer many benefits in this area: 1) smaller class sizes provide a unique
opportunity to better understand students and how they think; 2) the potential for real-life contexts in which to embed many classroom experiences; 3) a less-restricted environment in which to explore innovative ways of teaching; and 4) a better developed connection to and dependence upon the land (Schmidt, 2004).

The STEM department chairs at SU have agreed to support this effort (Dr. David Wing, Biology; Dr. Dan DeLella, Chemistry; Dr. Clarissa Mathews, Institute of Environmental and Physical Science; and Professor Reza Mirdamadi, Computer Science, Mathematics and Engineering). When appropriate, outside experts may be solicited as mentors. Supporting letters from the Provost and the Deans of the School of Natural Sciences & Mathematics, Education and Professional Studies, and the School of Graduate Studies and Continuing Education are included in this grant proposal.

Students interested in 5-12 General Science complete ENVS 462/562 Environmental Internship Capstone, and select from ENVS 460/560 Environmental Research Capstone or ENVS 461/561 Environmental Internship. ENVS 460/560, 461/561, and 462/562 are a triad of courses aimed at familiarizing students with reviewing primary literature, and conducting and presenting scientific research. Relevant research topics for STARS-WV participants might involve measurement and/or analysis of current environmental conditions, policies, and concerns within West Virginia such as monitoring and reporting pollutants involved in mountaintop removal or fracking; the effects of pests on agricultural crops; and the effectiveness of more environmentally sound pest diversion and trapping on farms and orchards located in West Virginia.

Students interested in 5-12 Chemistry complete both CHEM 450/550 Research in Chemistry and GSCI 534 Environmental Chemistry. Examples of relevant research topics for STARS-WV participants might concern detection and remediation of chemical pollutants common in West Virginia such as arsenic, copper tailings, mercury and other toxic compounds commonly present in the soil and water supplies. Past research projects and topics have included creating or testing filtration methods such as synthesizing filter foams or extraction columns.

Students interested in 9-12 Biology complete BIOL 425/525 Internship in Biology, and select from BIOL 394/594 Principles of Biological Research, BIOL 412/512 Comparative Animal Physiology, BIOL 415/515 Biological Research or BIOL 450/550 Neurobiology. Depending on the course, STARS-WV students could focus on current or historic health concerns from coal mining. Other research topics might include the unique flora, fauna, or ecological concerns of WV due to the mountainous terrain and the preponderance of bedrock and slate beds. Students might research common medical concerns to WV citizens such as black lung disease or cancer as cancer incidence is higher WV than the national average; or the neurological effects of lead especially in children as lead is present in many low-income West Virginians’ homes. Faculty research already includes genetic diversity of endangered rock cress and the effects of common creek pollutants on learning and memory.

Students interested in 5-12 mathematics complete Math 489/589 and Math 490/590 Mathematics Capstone I and II, and select MATH 414/514 The History and Development of Math or MATH 424/524 Foundations of Geometry. In the capstone experience, students learn methods and skills for the engineering design process, demonstrate the ability to explore principles of engineering experimentation and design, identify real world projects in multidisciplinary engineering areas, and develop a practical plan to complete the projects (individual and/or group). STARS-WV students could focus on educational pedagogical enhancements involving technology. Recent faculty research included digitally visualizing selected proofs of the Pythagorean Propositions by F. S. Loomis (1940 2nd ed.).

These capstone experiences provide exceptional training of the STARS-WV participants since the proposed program collectively provides 1) a deeper understanding of the scientific process through the experience of scientific exploration and inquiry; 2) improved knowledge, understanding and skill in scientific communication; and 3) the context and relevance of science within the Appalachian community through multiple perspectives such as scientific, social, economic, and educational.
STARS-WV participants will be encouraged to present research through SU’s Appalachian Studies, the Annual Literacy Conference, SU departmental research presentations, and the West Virginia Academy of Science (WVAS) as appropriate.

**vii. An infrastructure that is supportive of new teachers**

According to Sanders (2005), women feel more comfortable in non-traditional areas if they are part of a “critical mass”. Sanders suggested that at higher educational levels, interventions aimed at providing support to women in STEM fields include newsletters, student organizations, gatherings, and retreats.

Upon acceptance to the STARS-WV scholarship program, participants will be assigned one of these administrators as their primary STARS-WV adviser in addition to their primary STEM academic advisors. STARS-WV administrators and participants will convene as a cohort group at least 2 pre-determined times per semester during the 3 years of scholarship support. Information pertinent to STEM retention and teaching will be presented and discussed at these meetings. Expert faculty, master teachers and administrators from the Department of Education, Appalachian Studies, the Center for Teaching and Learning, and the RESA 8 educational systems have agreed to present and discuss topics such as Effective Technology in the Rural STEM Classroom, Communicating Effectively with Parents from Rural Communities and Creating a Culture of Content Literacy. It is our collective objective to provide a supportive program that involves highly focused STEM education training, pre-service teaching, sustained mentoring, and professional development to achieve our goal of producing 24 highly trained STEM teachers for WV and surrounding Appalachian regions. The rationale is that students leave STEM predominantly for academic, personal interest, or work environment reasons. Educating these students on specific topics including living and teaching in Appalachia will help them sharpen their career focus at a time when attrition is its highest in STEM education.

SU is an active member of the Appalachian Studies Association and a nationally recognized center for Appalachian Studies. As part of the EDUC 581/582 experience, STARS-WV scholars will participate in a two day, overnight Appalachian tour and retreat co-led by one of our expert faculty in Appalachian Studies and a member of the Noyce administrative team. The purpose of the tour is to familiarize students with the Appalachian cultural heritage. The tour starts in the WV capital city of Charleston and takes students to educational complexes, the Mining Museums, historic rail-road towns among other places rich with Appalachian history and culture. STARS-WV scholars will also participate in the annual Appalachian Studies Association conference as part their STARS-WV experience. SU hosted the conference in 2015.

**viii. Activities and support mechanisms that will be available to Noyce recipient.**

STARS-WV retention initiatives will intervene at this critical juncture in using several proven strategies. The STARS-WV participants will have several unique, early teaching opportunities. During year 1, the administrative team will work with the Academic Support Center to identify tutoring opportunities for the STARS-WV students. It is a program expectation that scholars will volunteer or work in the Academic Support Center as a tutor in their intended field of study during their first year of financial support.

During years 2 and 3 of the program (the senior year of undergraduate studies, and the following graduate study), five of the MAT courses include extensive field components, approximately 25-30 hours per course, for a total of at least 125 hours. Four of the MAT courses place students with an experienced, highly-qualified STEM instructor in public schools, where they will observe, reflect, design and/or teach several lessons, and in general participate in the life of the classroom.

SU recently instituted a summer teacher assistant program in collaboration with Jefferson County, WV. Jefferson County public high schools have substantial numbers of students who fail a required STEM course during the regular school year. Jefferson County offers a credit recovery program over the summer for students who need the credit(s) to graduate on time with their peers. In the summer of 2016, Jefferson County had 133 students registered, of which 85 were taking a math credit recovery course. The summer school principal, Dr. Alexander White, has a limited number of certified
classroom teachers available for the summer program and hires SU students to assist the teachers. Jefferson County would like to have at least 5 SU students each summer. STARS-WV scholars would have priority in the application process for these summer positions. A letter of Support from Dr. White is included.

These pre-service teaching experiences are designed to strengthen students’ pedagogical content knowledge skills by requiring them to assist with specific lessons in introductory STEM classes. They will also assist in designing and conducting active learning exercises and assessment tools. The STARS-WV faculty member assigned to the student will complete an evaluation at the end of the semester in which the pre-service teaching activity took place as part of the STARS-WV evaluation and dissemination component.

As part of SU’s commitment to retention, all STARS-WV participants will be dually advised and participate in regularly scheduled cohort group meetings. Once in the teaching field, graduates will return for the cohort meetings through the duration of the program. STARS-WV graduates are expected to continue their professional development and consider long term relationships with the Association of Science Teacher Education, the National Science Teachers Association, the American Association of Colleges for Teacher Education, the National Council of Teachers of Mathematics, and the American Educational Research Association, as appropriate.

ix. Plans to monitor and enforce compliance with the teaching service commitment.
The PI in cooperation with the Office of Enrollment Management agrees to track and monitor the compliance of the recipients with respect to their teaching service commitments. In the event of recipient non-compliance, we will notify the recipient of the repayment amount, provide documentation of the repayment, and attempt to collect repayment including interest as agreed upon in the scholarship agreement. Scholarship may revert to a loan if the recipient: 1) fails to maintain acceptable level of academic standing in the program; 2) is dismissed from the program or institution for disciplinary reasons; 3) withdraws from the program before completion; 4) declares that the recipient does not intend to fulfill the teaching service commitment; 5) fails to fulfill the teaching service commitment.

We will supply relevant statistical and demographic data on recipients as requested and cooperate with NSF third-party project monitoring. If a circumstance occurs before the completion of one year of teacher service, the total amount of scholarship received by the individual must be repaid. After this, the amount to be repaid is a proportion of the total scholarship received prorated appropriated to reflect partial service completion. In cases for which it is not in the best interests of the school district or not feasible for the scholarship or stipend recipient to fulfill the teaching service commitment SU will establish procedures with allowances for extreme hardship or other circumstances.

x. An evaluation plan.
It is essential to critically evaluate all aspects of the program in order to determine the effectiveness of our strategies to recruit and retain STEM majors into education and to provide systemic support and professional development beyond graduation and into the teaching career. The independent evaluator for this project is Dr. Donna L. Sundre, a recently retired assessment and evaluation expert. She previously served as Executive Director of James Madison University’s Center for Assessment and Research Studies (CARS see www.jmu.edu/assessment) and was a Full Professor of Graduate Psychology. She currently has emeritus status with JMU. She also served as a PI on a large NSF grant that featured assessment of scientific and quantitative reasoning. She has also consulted with hundreds of universities, institutes, and government agencies around the globe.

The evaluation will have two primary components: 1) a formative evaluation component in which we will monitor and assess project implementation and gather data to make ongoing program improvements and changes, and 2) a summative evaluation in which we will document and assess the project’s outcomes. The evaluation will include the collection of both quantitative and qualitative data, including surveys of student attitudes and
evaluation of student performances and teacher performances. This information will help us improve the program and produce tools that can be disseminated to other institutions. It is our expectation to produce highly effective STEM education course and assessment materials that will positively impact the 5-12 STEM teaching and learning communities in rural areas of WV.

The formative evaluation component will be designed to provide ongoing program implementation data to the PIs so that program adjustments can be made as needed. Demographic data will be collected by the PI during the scholarship application process. We will collect information on ethnicity, gender, socioeconomic status, ability/disability, family (parents’ highest level of education) and origins (rural, urban, Appalachian, etc.). A data linking system will be employed to protect student identities. In this way, a separate file will be kept in the evaluator’s office that connects (or links) the student’s individual identity with the link number assigned. A database for each cohort will be established for monitoring and analyzing program efficacy.

The summative component will focus on measuring students’ attitudes, mastery of content and overall teaching effectiveness. We will assess attitudinal changes of students toward science and math by means of a pre/post attitude assessment. The SENCER SALG is designed to address teaching science content in the context of societal issues. We will use the SENCER SALG to assess student confidence about their scientific ability, their interest in science, other attitudes about science, and their view of how assignments helped their learning. We will administer the pre-assessment STARS-WV at the first cohort meeting. We also plan to re-administer the attitude assessments on an annual basis. At a minimum, students will complete the post-assessment during their student teaching semester in order to assess their attitude changes over the course of the program. A math version of this assessment will be created for students in the mathematics 5-12 program.

We will critically review the evaluation sheets used during the cohort meetings. We will conduct exit interviews with each student who completes the STARS-WV program, and we will survey teachers out in the field for a minimum of two years or until the grant is expired, whichever comes first. The measures for mastery of content will be STEM course grades, EDUC course grades and scores on the PRAXIS exams for science and math certification. Particular attention will be paid to EDUC 581 and EDUC 582 and the STEM research courses which will have feedback from both the STEM faculty and STARS-WV adviser.

To evaluate overall teaching effectiveness, members of the administrative team will work with the evaluator to amend the student teaching assessment rubric to include indicators that link content knowledge pedagogy to societal knowledge. Portions of this rubric will be used for the in-class research/projects as well. STARS-WV administrators will evaluate pre-service teachers on their ability to develop lesson plans within a societal context and delivery of the instruction. Certain indicators (e.g. demonstrated content of the knowledge) will be compared to historical records. We expect STARS-WV students will have superior pedagogical content knowledge and teaching dispositions. Teachers in the field will complete the Perceptions of Success Inventory for Beginning Teachers (PSI-BT). The PSI-BT measures factors documented in research that contributes to beginning teachers’ perceptions of success: 1) Administrative Support, 2) Classroom Climate, 3) Mentor Support, 4) Colleague and Instructional Resource Support, 5) Commitment, and 6) Assignment and Workload.

The evaluator will provide ongoing evaluation feedback by providing annual reports on the preliminary results of the formative and summative evaluations. At the end of the 5-year project period, the evaluator will provide a final, summative evaluation report that will present overall findings on the scholars’ persistence in the program, mastery of STEM knowledge, knowledge of STEM pedagogy, and effectiveness of STEM teaching. Dates for report submission will be coordinated with the PI.

The PI, or Co-PI and one student will attend meetings of grantees and other scholarly researchers that are of interest to the recruitment, retention, or
academic agenda of this program. It is expected that in years 3, 4 and 5 the PI, or Co-PI and one student will present results directly associated with STARS-WV program.

**xi. Plans for disseminating the results of the project.**
The knowledge acquired, especially about the effectiveness of our strategies in attracting, retaining and developing high-quality STEM teachers, will be presented and otherwise made available at conferences such as the Integrated STEM Education Conference, and the conferences of the Association of Science Teacher Education, the National Science Teachers Association, American Association of Colleges for Teacher Education, and the National Council of Teachers of Mathematics. Locally, presentations will be made to the Faculty Research Forum on the Shepherd campus, department, and school meetings of the University’s Education and STEM faculty, and the West Virginia Science Teachers Association.

It is our expectation that the STARS-WV program will become the foundation upon which an important field of research emerges, specifically how to best identify and train STEM teachers for Appalachian regions. White papers, presentations, and continued research, along with program improvements will be posted on SU’s website. Specific curricula will become part of SU’s continuing legacy as a leader for producing excellent teachers. It is our full expectation that the administrators of this grant and future participants of the program will continue to develop and improve upon this structure well beyond the grant duration.

**Program Results and Future Expectations.**
With the resources requested in this proposal we expect STARS-WV graduates to 1) measurably improve their students’ academic scores and interests in STEM fields; 2) the STARS-WV graduates to seek out and embrace leadership roles in the educational community; 3) and to contribute significantly to a field of study that is urgently needed. We expect SU to become a national leader for STEM teacher education programs serving rural communities. This goal aligns with the strategic outlook of our new President Mary Hendrix who achieved a stellar research career after earning her bachelor’s degree at SU. She has now returned to provide pathways forward for current and future SU students. We expect SU to institutionalize 5 year programs to obtain a BS STEM + MAT + Certification that will consistently enroll 10 – 16 new students each year, and we expect a significant decrease in the number of SU students leaving STEM fields.

**Prior NSF Support.**
Dr. Karen S. Adams, PI on NSF S-STEMS Award #0422340 (Formerly CSEMS). Project entitled, *Scholarships to Enhance Mathematics Learning and Research* (SEMLAR). The award was $55,000 for 16 scholarships for women majoring in mathematics at Wilson College, Chambersburg, PA, 17201 for years 2004–09. The number of women majoring in mathematics at Wilson College tripled.