Appendix 4: Assessment tools

Measurement tool 9: Employer/Mentor Questionnaire

Your employee-student, Mr./Ms._______________________________, is a graduate of the Department of Biological Sciences at Western Michigan University. As part of our self-assessment program we are seeking to determine if we are adequately preparing our students for their professional careers. In this respect we ask if you could take a few minutes to complete the following questionnaire regarding this student's academic preparation.

In what capacity is this student known to you?....

Graduate student: (which field of study?):

Health professions student: (which specialty):

High School Teacher (which subjects):

Employee (specify job title):

How well is this student prepared in the following areas? Please indicate your evaluation using the following scale:

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<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>not applicable</td>
<td>very poorly</td>
<td>poorly</td>
<td>adequately</td>
<td>well prepared</td>
<td>very well prepared</td>
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</table>

General Biological Knowledge
Biology field and laboratory techniques
Chemistry
Physics
Mathematics
Statistics
Public Speaking Skills
Technical Writing
Problem Solving/Critical Thinking
technical laboratory skills

If you marked 1 or 2 for skills, please comment about what is lacking.

Within the Biological Sciences, does this person have adequate knowledge of the following areas to meet his/her professional responsibilities under your supervision?

Molecular Biology/Biochemistry
Cellular Biology
Plant Biology
Non-Human Animal Biology
Human Biology
Microbiology
Genetics
Environmental Biology/Ecology
Evolutionary Biology
Developmental Biology
Physiology

Other - Please specify __________________________

Thank you for your time. Please return this questionnaire in the enclosed, stamped, addressed envelope.
Measurement tool 10: Alumni survey

1. What is your current activity/employment?

2. Which major program did you take at WMU?  
   - Biomedical Sciences  
   - Biology

3. Did you complete a research project as part of your major?  
   - Yes  
   - No

4. Have you gone on to graduate or professional school?  
   - Yes  
   - No

For the following statements, please indicate how strongly you agree with each statement by circling the appropriate number.

1 strongly disagree  2 disagree  3 neutral  4 agree  5 strongly agree

The following core courses were significant for the major.  
Please score only if you took the course.

5. BIOS 150 Cell and Molecular  
6. BIOS 151 Organismal  
7. BIOS 211 Human Anatomy  
8. BIOS 213 Cell Biology  
9. BIOS 250 Genetics  
10. BIOS 301 Ecology  
11. BIOS 312 Microbiology  
12. BIOS 319 Plant Physiology  
13. BIOS 350 Human Physiology  

14. I was satisfied with availability of courses in the major.
15. I was satisfied with the content of the major.

The following cognate requirements were important.

16. Inorganic chemistry  
17. Organic chemistry  
18. Biochemistry  
19. Biochemistry laboratory  
20. 8 hours of college mathematics  
21. 2 semesters of general physics with lab  
22. GEOL 130 as a substitute for one physics course  

23. The major had sufficient practical training (lab or field).  
24. A research project would have been valuable.  
25. I attended WMU for a Biological Sciences major.  
26. My job utilizes my major.  
27. My major helped fulfill my career aspirations?  
28. I came to WMU to prepare for medical or dental school.  
29. My preprofessional curriculum was helpful.  

The Biological Sciences Curriculum prepared me well in

30. Molecular Biology/Biochemistry  
31. Cellular Biology  
32. Plant Biology  
33. Non-human Animal Biology  
34. Human Biology  
35. Microbiology  
36. Genetics  

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<table>
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<th>Question</th>
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<th>3</th>
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<td>Environmental Biology/Ecology</td>
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<td>Evolutionary Biology</td>
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<td>Physiology</td>
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<td>Technical laboratory skills needed for advancement</td>
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<td>Experiences with the major changed my career objectives. Please explain</td>
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<td></td>
<td>briefly:</td>
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<td>Changes should be made in the major curriculum? Please describe briefly:</td>
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<td>Any additional comments?</td>
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