Work Plan 2021-2022
August 27, 2021
Stephen Waller, Dean of Instruction

Vision for Success Goal #1: Increase by at least 20 percent the number of CCC students annually who acquire associates degrees, credentials, certificates, or specific skill sets that prepare them for an in-demand job.

Strategic Initiative 1 - Student Learning
Strategic Initiative 2 - Student Progression and Completion

Work Plan
Increase STEM student momentum point attainment.

<table>
<thead>
<tr>
<th>STEM Pathway Momentum Points</th>
<th>2019</th>
<th>2020</th>
<th>2021 Goal</th>
<th>2022 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 units in 1st semester</td>
<td>20.0%</td>
<td>18.5%</td>
<td>22.2%</td>
<td>25.9%</td>
</tr>
<tr>
<td>30 units in 1st year</td>
<td>19.1%</td>
<td>16.0%</td>
<td>19.2%</td>
<td>22.4%</td>
</tr>
<tr>
<td>ENGL B1A completion in 1st year</td>
<td>34.9%</td>
<td>29.0%</td>
<td>34.8%</td>
<td>40.6%</td>
</tr>
<tr>
<td>Transfer math completion in 1st year</td>
<td>26.2%</td>
<td>21.4%</td>
<td>25.7%</td>
<td>30.0%</td>
</tr>
</tbody>
</table>

Increase STEM degree completions.

<table>
<thead>
<tr>
<th>STEM Degree Completions</th>
<th>2019</th>
<th>2020</th>
<th>2021 Goal</th>
<th>2022 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology AS and AS-T</td>
<td>36</td>
<td>23</td>
<td>35</td>
<td>46</td>
</tr>
<tr>
<td>Chemistry AS and AS-T</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Computer Science AS-T</td>
<td>20</td>
<td>32</td>
<td>35</td>
<td>38</td>
</tr>
<tr>
<td>Engineering AS</td>
<td>15</td>
<td>18</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>Geology AS-T</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Mathematics AS and AS-T</td>
<td>44</td>
<td>35</td>
<td>40</td>
<td>45</td>
</tr>
<tr>
<td>Physics AS-T</td>
<td>33</td>
<td>23</td>
<td>24</td>
<td>28</td>
</tr>
<tr>
<td><strong>All STEM</strong></td>
<td><strong>153</strong></td>
<td><strong>132</strong></td>
<td><strong>158</strong></td>
<td><strong>185</strong></td>
</tr>
</tbody>
</table>

Improve faculty FTES and resources to improve discipline FTES.

<table>
<thead>
<tr>
<th>Discipline (Annual FTES)</th>
<th>2019-20</th>
<th>2020-21</th>
<th>2021-22 Goal</th>
<th>2022-23 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR</td>
<td>40.0</td>
<td>35.3</td>
<td>24.0</td>
<td>30.0</td>
</tr>
<tr>
<td>BIOL</td>
<td>700.8</td>
<td>1005.8</td>
<td>1100.0</td>
<td>1400.0</td>
</tr>
<tr>
<td>CHEM</td>
<td>316.1</td>
<td>383.0</td>
<td>395.0</td>
<td>422.2</td>
</tr>
<tr>
<td>ENGR</td>
<td>72.4</td>
<td>98.5</td>
<td>84.0</td>
<td>90.5</td>
</tr>
<tr>
<td>ERSC</td>
<td>84.9</td>
<td>89.7</td>
<td>94.2</td>
<td>99.6</td>
</tr>
<tr>
<td>GEOG</td>
<td>79.1</td>
<td>75.3</td>
<td>78.8</td>
<td>82.3</td>
</tr>
<tr>
<td>GEOL</td>
<td>135.5</td>
<td>121.4</td>
<td>127.5</td>
<td>133.9</td>
</tr>
<tr>
<td>MATH</td>
<td>1269.6</td>
<td>1449.7</td>
<td>1522.2</td>
<td>1598.3</td>
</tr>
<tr>
<td>PHSC</td>
<td>51.7</td>
<td>42.8</td>
<td>45.6</td>
<td>53.5</td>
</tr>
<tr>
<td>PHYS</td>
<td>115.6</td>
<td>137.1</td>
<td>120.2</td>
<td>142.8</td>
</tr>
</tbody>
</table>
Improving the following processes will ensure students stay on the path to progression and completion and improve FTES.

• Enrollment Management Strategies
  o Increase Health Science pre-req science course capacity
    ▪ Develop a new biology and chemistry faculty recruiting plan to increase foundational FTEF needed to generate FTES
  o Improve math student success
    ▪ Restructure math student academic support using the Math Learning Center and STEM group student leaders.
    ▪ Provide new professional development opportunities directly to BC math faculty that are tailored specifically to improve BC student learning.
  o Improve rural, inmate, and BS Southwest STEM course and program options
    ▪ Assign faculty to critical math courses across the curriculum at Delano and BC Southwest.
    ▪ Work with Jessica Wojtysiak to develop an effective and rapid scheduling process for rural and BC Southwest.
    ▪ Work with the Inmate Scholars team to provide foundational courses for the completion of the BSIA program and others, including courses such as PHSC B12.
  o Improve communications to STEM students (Get on the Path. Stay on the Path)
    ▪ Use Ocelot to text students as to highest priority courses needed to get on their pathway and meet momentum points.
    ▪ Develop plan to reassign students when taking classes as “apparent STEM majors” but officially listed as a different major.

**Vision for Success Goal #2:** Increase by 35 percent the number of CCC students transferring annually to a UC or CSU.

**Strategic Initiative 1 - Student Learning**

**Strategic Initiative 2 - Student Progression and Completion**

**Work Plan**

Improving the following processes will ensure students stay on the path to progression and completion

• Develop new “Grow our own” program with CSUB and UC Merced
  o Increase transfer to CSUB STEM programs through summer research experiences.
  o Apply for new NSF S-STEM PLUS grant to provide transfer scholarships for BC students.
• Lead English and Math Success Group with Jennifer Jett
  o Develop summer English and Math Bootcamps

**Vision for Success Goal #3:** Decrease the average number of units accumulated by CCC students earning associate’s degrees, from approximately 87 total units (the most recent system wide average) to 79 total units—the average among the quintile of colleges showing the strongest performance on this measure.

**Strategic Initiative 1 - Student Learning**

**Strategic Initiative 2 - Student Progression and Completion**

**Work Plan**

Improving the following processes will ensure students stay on the path to progression and completion

• Increase directed communications to STEM students with high unit counts
  o Use KCCD data systems to identify STEM students with high unit count and use Ocelot to text them with directions for counseling.
**Vision for Success Goal #4:** Increase the percent of exiting CTE students who report being employed in their field of study, from the most recent statewide average of 60 percent to an improved rate of 69 percent—the average among the quintile of colleges showing the strongest performance on this measure.

*Strategic Initiative 1 - Student Learning*

*Strategic Initiative 2 - Student Progression and Completion*

**Work Plan**

Improving the following processes will ensure student learning and hands-on experience in chosen field of study

- Provide enhanced non-credit math support through pathways-focused sections and support sessions.
- Use summer Math Bootcamps to provide college preparation (CDCP) relevant to student's pathway.

**Vision for Success Goal #5:** Reduce equity gaps across all of the above measures through faster improvements among traditionally underrepresented student groups, with the goal of cutting achievement gaps by 40 percent within 5 years and fully closing those achievement gaps for good within 10 years.

*Strategic Initiative 1 - Student Learning*

*Strategic Initiative 2 - Student Progression and Completion*

**Work Plan**

Improving the following processes will ensure students stay on the path to progression and completion of momentum points and close achievement gaps

- Expand the MESA program
  - Hire new Program Director
  - Focus on fund-raising and new grants for MESA and other diversity STEM initiatives.
- Revise and codify the Aspire Faculty Diversification Program
  - Create a new “Aspire Light” program that does not require faculty mentoring time when faculty are not available to support the full program.
  - Develop STEM “why become a BC faculty” web page with faculty and student testimonial videos.

**Strategic Direction #4 – Leadership and Engagement**

**Work Plan**

Improving the following processes will ensure that the Guided Pathways framework is at the heart of everything we do at BC

- Expand grant writing across the College
  - Hire new BC Director of Grants and Resources Development
  - Update Grants webpage.
  - Offer new grant development workshops.
  - Assign Grant Development team members to meet regularly with faculty chairs.