

# CURRICULUM ALIGNMENT 2.0 CONFERENCE 2017:

**COLLABORATION FOR STUDENT SUCCESS** 

# FRIDAY, MARCH 3, 2017

VALENCIA COLLEGE - WEST CAMPUS • SPECIAL EVENTS CENTER 1800 SOUTH KIRKMAN ROAD • ORLANDO, FL 32811



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# VALENCIACOLLEGE

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# **Conference Report**

The 2017 Curriculum Alignment Conference was held Friday, March 3, 2017 at Valencia College West Campus Special Events Center (Building 8). Approximately 100 teachers, faculty, advisors, and administrators from partner colleges and UCF attended. The conference followed a series of academic discipline meetings in Biology, Chemistry, Physics, Mathematics/Statistics and Engineering held in Fall 2016 and Spring 2017.

#### The conference featured:

#### WELCOME

# Dr. Elizabeth Dooley, Vice Provost for Teaching and Learning and Dean, College of Undergraduate Studies, UCF

Dr. Dooley opened the meeting by welcoming everyone and giving a brief overview of the speakers who will be presenting their research findings on the various areas that are covered within the curriculum alignment.

# Dr. Jeff Jones, Vice Provost, UCF Regional Campuses and Continuing Education, UCF

Dr. Jones welcomed attendees and gave a brief overview of the Curriculum Alignment initiative, outlining the purpose of the day's event and the important work that is conducted during the conference.

## **CURRICULUM MAPPING**

**Dr. Melody Bowdon, Executive Director, Faculty Center for Teaching and Learning and Faculty, UCF** Dr. Bowdon gave a presentation on Curriculum Mapping.

#### **COURSE SEQUENCE REPORT**

# Dr. Teresa Dorman, Associate Dean, College of Sciences, UCF

Dr. Dorman shared and reviewed updated data on student success in course sequences between and among the direct connect institutions.

# **BREAKOUT DISCUSSIONS**

Participants were separated into five groups and asked to reflect on the curriculum mapping exercise, the course sequence data, the discipline discussions that occurred in the prior year, and individual institutional performance metrics. Groups were asked to consider three prompts:

- What are the top three barriers to student success?
- What can I (or my colleagues and I, or my college) do to overcome these barriers?
- What do we need to make it happen?

Feedback was collected for a report-out after lunch.

# **CURRICULUM ALIGNMENT REPORT**

# Dr. Harrison Oonge, Assistant Dean, College of Undergraduate Studies, UCF

Dr. Oonge provided an overview of Curriculum Alignment efforts to date, reaffirming the goals and highlighting achievements and opportunities.

# **REPORT OUT: GROUP DISCUSSIONS**

# Dr. Teresa Dorman, Associate Dean, College of Sciences, UCF

Dr. Dorman shared a summary of the breakout, groupwork conducted prior to the lunch break. That report is attached.

PANEL DISCUSSION: NEXT STEPS FOR CURRICULUM ALIGNMENT (Where Do We Go From Here?)
Dr. Karen Borglum, Assistant Vice President of Curriculum and Articulation, Valencia College

# **CLOSING REMARKS**

Dr. Oonge provided closing remarks.

# Report Out: Group Discussions Curriculum Alignment Conference March 3, 2017

Conference participants were separated into small discussion groups and asked to reflect on the curriculum mapping exercise, the course sequence data, the discipline discussions that occurred in the prior year, and individual institutional performance metrics. Considering this, three questions were posed. What follows is a summary report of the group discussions. Items are grouped and discipline attribution is provided.

# What are the top three barriers to student success?

#### Academics

(Chem) Lack of attendance (Math, Engr) Study skills and academic maturity (Bio, Math) Culture shock from transfer and class size (Chem) Repeaters

#### **Finances**

(Engr) Cost – once they transfer to university (some students are working in addition to school) (Engr) If students get financial aid the students do not take those courses seriously

# Prerequisite Knowledge

(Phys, Engr) Students may not understand that they need a strong background in math and physics and when taking the prerequisites; weaknesses in transferal or retention of necessary math skills

(Engr) Students are only concerned about the grades rather than true understanding.

(Phys) Poor technical/science reading comprehension

(Math) Retaining prerequisite knowledge

# Life

(Math, Phys) Time allocation and management issues (Math, Bio) Life commitments of students (illness, money, etc.)

## **Discipline/Course Specific**

(Chem) Lack of rigor

(Math) Calculator use policies differ at different institutions and in different levels of mathematics (Bio) Ability to understand course content

(Math) Reliance on memorization versus conceptual understanding

# What can I (or my colleagues and I, or my college) do to help overcome these barriers? Math

- Provide more opportunities like the curriculum alignment meetings to discuss each of these barriers in details, have set times during the meeting to focus conversations on these barriers
- Improve our ability to help students recognize how math classes provide foundational knowledge for their degree programs, that are not pure math majors
- Participate in cross-discipline exchange opportunities to help students see where disciplines overlap or provide foundational knowledge

## Bio

- Align advising resources between institutions
- Recognize patterns in student success and lack of success
- Create a pre-test assessment that students can voluntarily take prior to transferring into UCF as Biology major
- Pre and post-test in courses

#### Chem

- Ask the students why think they are unsuccessful. Their perceptions might be different than our theories, and may inform our actions.
- Attendance benefit of smaller classroom at DC institutions.
  - o UCF: how can we encourage attendance? Clickers or Learning Analytics.
  - Downside: takes 5-6 minutes to answer one question.
- Repeaters DC often have high withdrawal rates.
  - We need data on repeated attempts, and how this correlates with success/failure in future classes
- Decreased rigor
  - Rigor may suffer due to too much weight to online homework/non-exam assessment.
     Many instructors give 10% of the course grade to Mastering Chemistry, which buffers low exam scores.
  - o **Rigor may suffer** from combined lecture/lab course structure that creates lab grades as another buffer for exam scores.
  - Lack of rigor continues through the entire undergraduate education because feedback from professional schools is that students are unprepared. Professional schools require application level thinking; how much of what we do is above recall and comprehension?

# Engr

- High Schools need to teach trigonometry skills and students should be through with calculus.
- Counselors/Advisors need to be aware of the requirements for engineering programs.
- We need to focus on getting students to know the process and the concepts rather than using calculators.
- Can we balance the use of mental computation with the use of tools that will assist students in learning the concepts?

# Phys

- Part-time student Direct-Connect (for students who must work full-time)
- Modification to financial aid system
- Effective early alert system
- Academic support system (qualified/professional tutoring)
- Teaching students necessary study skills

# What do we need to make it happen?

#### Math

- Support to coordinate more focused alignment meetings on these topics
- We need **information** from other majors about where they use mathematics in their programs to help students see the math concepts they are using in context of other majors
- We need help reflecting at a state level how the impact of calculator use in k-12 classes is negatively impacting student success in college level math classes, they are introduced too early before they have basic numeracy skills
- We need ways to disseminate/include our discussions to others in the system
- We need to have real ways to assess student's foundation knowledge and provide opportunities outside of class for students to build those skills that they are missing

# Biology

- Group states that curriculum is aligned
- Look at native students' pattern with Biology 1 and Biology 2 to see if there is a gap year issue

#### Chem

- **Student focus groups** to hear from the students on their needs.
- Create a transfer mentor who is already in upperclass coursework to help new transfer students.
- **Push back** on federal financial aid limits for pre-requisite and developmental classes. Our students need these classes.
- Discuss attendance policies, teaching strategies, and assessment types in the curriculum alignment discussions.

#### Engr

- Coordinating with math departments and physics
- Advising more carefully
- **Communication** between faculties and schools
- Develop a **list of competencies** that students need coming into the program

## **Physics**

- **Time** (stretch course over three semesters, Physics 1, 2, and 3)
- Good, experienced, hard-working students to help as supplemental instructors (trained supplemental instruction program)
- **Decrease loads** or responsibility on faculty
- Need to know expectation and content of future courses
- **Continued communication** and maintenance of alignment efforts
- Share sample tests