Integrated Statistics Pathway

Mt. San Antonio College (Mt. SAC)
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Integrated Statistics Pathway

- For students eligible for Beginning Algebra
- Students complete college level statistics in two courses (instead of three).
- Heavy emphasis on teaching with best practices.
- Students who finish the second course satisfy California State University and University of California Math GE requirements.
- The second course articulates with statistics courses at California State Universities.
Integrated Statistics Pathway

- First Semester: Integrated Intermediate Algebra (Math 70S – 5 units)
- Prerequisite: eligibility for Beginning Algebra
- Covers: Main topics of Intermediate Algebra. Omits side topics.
- Materials developed at Mt. SAC
- Productive Struggle learning model

- Second Semester: Integrated Statistics (Math 110S – 5 units)
- Prerequisite: Integrated Intermediate Algebra
- Covers Traditional Elementary Statistics Topics
- Uses Carnegie’s Statway Materials
- Productive Struggle learning model.
Outcomes

• Students have deeper understanding of statistics (almost twice as much time is spent compared to normal statistics).
• Overall throughput for the Integrated Statistics pathway is 36% (completion on 1st attempt), or 41% (allowing for repeated courses).
• Compare this to 5% throughput for the traditional sequence (completion on 1st attempt) or 13.5% (allowing for repeated courses).
UC and CSU General Education

- Math 110S satisfies Cal State University GE Area B4 – Quantitative Reasoning.
- Math 110S satisfies the University of California IGETC Area 2 – Math and Quantitative Reasoning.
Articulation Agreements

- All CSU campuses requested have granted articulations with Math 110S for college-level statistics.
- Agreement with CSU San Francisco is pending.
- Math 110 (Statistics) C-ID designation is pending.
- Other articulation requests to follow.
Breaking News

• As of Fall 2015, the UC is no longer requiring Intermediate Algebra as a prerequisite Statistics (see UC TCA Guidelines).
• The CSU has invited all community colleges to submit statistics pathways for GE Area B4 credit. This can be a pre-statistics course and a stats course or a ”stretch” pathway like Statway (without an Intermediate Algebra).
• The C-ID Group is considering creating a Math 111 C-ID descriptor for alternative statistics pathways. This needs to be implemented into AA-T and AS-T Templates to be useful.
The Future

• After receiving the C-ID designation for Math 110 – Elementary Statistics, our Integrated Statistics Pathway will be used as a math module in other Mt. SAC pathways for transfer degrees leading to California universities.