What is tracking?

*Tracking* is the practice of placing students into different groups or classes, based mainly on their measured academic abilities.

- Rrigidity or fluidity of tracking varies by school
- Types of tracks have changed over time
  - Academic, general, vocational
  - Basic, honors, college-prep
- Non academic factors influence track assignment
  - scheduling
  - non-cognitive traits / behavior
  - student decisions
What is your professional perception of tracking...?

Does tracking still occur? In your school?
- Formal
- Informal

<table>
<thead>
<tr>
<th>If yes...</th>
<th>If no...</th>
</tr>
</thead>
<tbody>
<tr>
<td>What form does it take and why?</td>
<td>What prevents tracking from happening?</td>
</tr>
</tbody>
</table>

- What kinds of high schools do you think have the most severe tracking?
- Is tracking more relevant within schools or between schools?

Studies of Tracking

  - Tracking based on beliefs that measured achievement equates to ability or potential.
  - High schools continue tracking because it serves the interests of the highest achieving students/families.

  - 52 administrators, teachers, and mothers of middle school students in 26 school districts in the Boston area. The data show that parents have some influence over the ability group and course placement process in most school districts, but the degree to which their efforts are welcomed, restricted, or thwarted varies significantly and somewhat idiosyncratically from one school system to the next. These limits on parental influence as well as other restrictive school policies help explain low enrollments in advanced mathematics courses in the U.S.
Studies of Tracking

- Study by Dornbusch in the mid 1990's:
- Selected 1200 students with high, middle, and low grades in high schools northern California

Findings:
- Students (and parents) with college intentions often don't know when a student has been tracked out of college-preparatory science and math classes.
- The proportion of high-ability African American and Latino students not taking college prep courses in math and science was more than twice that of white and Asian American students of the same ability level.
- The proportion of college prep math and science courses markedly increased with higher parent education. Having more highly educated parents, however, did not influence African and Latino American enrollments nearly as much as for whites and Asian Americans.
- The factor that most determined a student's first high school tracking placement was his or her eighth grade test score. Other factors that were significantly related were elementary school grades, attendance and negative comments about a student's behavior in his or her files.
- Among students who had high educational expectations and thought they were in the college-prep track, almost half of the African American and Latino students were not actually in college-prep math and science courses, and about 20 percent of white and Asian American students weren't either.

Studies of Tracking


- Whereas tracking was thought to have been eliminated from the majority of schools within the US education system, Lucas argues that, in the main, it was the terminology and the mechanics of tracking, not its outcomes, that changed. As a result, there came to be new forms of stratification in schools.

- Despite the "unremarked revolution" in school practice, wider social inequality continues to advantage those of more means; the post tracking era has not ushered in a new era of equality; those of modest means are disadvantaged in high school placement and; track structures appear more rigid in schools with greater socio-economic diversity. (pp. 112-114)
Studies of Tracking

“Why Do They Give the Good Classes to Some and Not to Others?: Latino Parent Narratives of Struggle in a College Access Program.” The Teachers College Record, Susan Auerbach, 2002

My Research with New Start Summer Bridge Program

- Essays and Interviews

Students make decisions about high school courses in 8th grade, often with little to no parental involvement.

For most, their involvement with counselors is limited.

For first-generation college students, this is problematic because they are the most informed in their family about college. They rely on teachers, counselors, and friends at school.

For second-generation college students, course selection, college planning, and college choice negotiations are centered in family interactions.
Second generation college students interacted infrequently with counselors, and relied on parents

Beth:
“There were 600 other seniors in my class and probably only 5 counselors. I met with my counselor probably once on an individual basis and maybe 3 other times as a small group. However, I did not let this issue get in my way or impact my decision on college.”

Most first-generation college students were left on their own to strategize about college

- Parents were very encouraging and supportive, but lacked info:

“My parents weren't able to attend college. My mom finished high school and that was it. And my dad didn't finish high school. So they just always tried to encourage me. It's like, "Oh, we didn't get to do it. Don't become like us. You deserve better, so just go as far as you can go."

—Maria

“My biggest obstacle has been to teach myself what to do in order to get into college...I did not have someone to show me all the ins and outs of the collegiate world. Along the way I did have the help of my parents and family but we had to find the information together rather than it being handed to me personally. Many of my nights were filled with doing internet searches and leaving our searches puzzled with my mom and grandfather.”

—Ryan
For many first-generation college students, counselors and teachers stepped in as surrogate family

- **Negative**

  “On one occasion, I took the liberty to as her to review my application for the University to ensure that it was complete. With simply glancing at it briefly she tried to discourage me from applying because she believed that with my 2.8 grade point average, I stood no chance of being admitted.” – Angelica

  “A couple of my high school teachers had a role in my decision to attend college and which college I should attend. I was rather indecisive my junior year as to whether I should go out of state or stay in state. My AP English teacher helped me think about which would be the better decision.” – Erika

  “When I started considering the possibility of attending the UofA., some teachers doubted that I could make it, and encourage me to attend a small community college. They doubted I could make it, since I did not speak English very well.” – Cora

-The negative influence was particularly prevalent for students in lower SES schools.

- “A couple of years ago my high school was a low performing school. So for the 2006 2007 academic school year the teachers and administration’s main goal was to get the seniors to pass AIMS and graduate. We didn’t hear much about going to a University or going out of state. Most of the counselors would encourage students to go to a community college or a trade school.” – Eduardo

- I have to say that most of my teachers did not influence me to go to college. They never really brought up the subject to us during my years in high school. Only once can I recall my English teacher briefly mentioning applying to college but other than that it was never discussed all they really cared about was making sure we at least graduated from high school.” – Monica
But...those counselors who intervened positively had a huge impact for first-generation students (surrogate family).

Positive

- “If it wasn’t for [my counselor], I don’t how far I would have gotten. I have a great deal of appreciation towards her; I know that she was a big part of my success. She was my mom in school. When things were not at the level she expected, she let me hear it.” – Mario

- “I have always had good counselors, but [name] was the best because she cared about me so much! She was the person I just did not want to disappoint because if I did, I would break her heart. She had so much confidence in me; she was so sure that I was going to succeed in college. She was always so positive about everything I did, even if I failed at something, because she believed with the utmost faith that I will overcome my challenges. She was a great resource in guiding me toward college. I trusted her to take care of me, and she did.” – Sharon

Alignment of Graduation Requirements and University Admission

<table>
<thead>
<tr>
<th></th>
<th>AZ High School Grad 2013</th>
<th>Admission to Univ of AZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>4 credits</td>
<td>4 units</td>
</tr>
<tr>
<td>English</td>
<td>4 credits</td>
<td>4 units</td>
</tr>
<tr>
<td>Science</td>
<td>3 credits</td>
<td>3 units</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3 credits</td>
<td>2 units</td>
</tr>
<tr>
<td>CTE/Fine Art</td>
<td>1 credit</td>
<td>1 unit</td>
</tr>
<tr>
<td>Electives</td>
<td>7 credits</td>
<td></td>
</tr>
<tr>
<td>Second Language</td>
<td>0 credits</td>
<td>2 units</td>
</tr>
<tr>
<td>GPA</td>
<td></td>
<td>2.0</td>
</tr>
<tr>
<td>Deficiencies?</td>
<td></td>
<td>Up to 2, but not in same subject, and not both math and lab science</td>
</tr>
</tbody>
</table>
What is college prep? Access to What?

- What do college advisors recommend for math, science, or engineering majors:
  - H.S. students should take math their senior year (whether or not they need it for graduation).
  - They should take the highest math class that can (this will vary depending on which course they start with).
  - They should take at least a year of both Chemistry and Physics.
  - Take AP courses in math and science (especially Calculus).

Minimum vs. Optimum Preparation

* Early exposure to college-level courses
* Decreasing the cost of college through AP and Dual Enrollment
* 4 year trajectories in STEM majors

- 4 years of math
  - What is the content?
  - Placement into College Algebra can delay a student by years and prevent entry into certain science courses, majors, Colleges within the University

- 3 years of science
  - Exposure in high school improves performance in college, preventing attrition
**Engineering?**

**First Semester**
- **Course Units**
  - ENGR 102
  - MATH 125# (Calculus)  
  (prerequisites = math readiness test score)
  - CHEM 151
  - ENGL 101
  - Tier 1 INDV*

  **Total 16 credits**

**Second Semester**
- **Course Units**
  - CSC 227
  - MSE 110
  - MATH 129 (Calculus II)  
  (prerequisite = Math 124 or 125)
  - PHYS 141
  - ENGL 102

  **Total 18 credits**

---

**Some strategies...**

- Group college counseling
- Communication with teachers
- Use students to ‘spread the word’ as *ambassadors* regarding
  - class selection in high school (as early as middle school)
  - Keeping ‘on track’ for college readiness
- ??