STUDENT SUCCESS:
IT'S A MATTER OF LIFE AND DEATH

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President
Lakeland Community College
Student Success: 
It’s a Matter of Life and Death!
The Clear Benefits of Education

Earnings and unemployment rates by educational attainment, 2015

- **Medan usual weekly earnings**
  - Doctoral degree: $1,623
  - Professional degree: $1,730
  - Master's degree: $1,341
  - Bachelor's degree: $1,137
  - Associate's degree: $798
  - Some college, no degree: $738
  - High school diploma: $678
  - Less than a high school diploma: $493

- **Unemployment rate**
  - Doctoral degree: 1.7%
  - Professional degree: 1.5%
  - Master's degree: 2.4%
  - Bachelor's degree: 2.8%
  - Associate's degree: 3.8%
  - Some college, no degree: 5.0%
  - High school diploma: 5.4%
  - Less than a high school diploma: 8.0%

All workers: $860, 4.3%

Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.
The Completion Rate for **Low Income Students** is Disproportionately Low.

<table>
<thead>
<tr>
<th>B.A. Rate by Age 24 (2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young People from Highest Income Quartile</td>
</tr>
<tr>
<td>Young People from Lowest Income Quartile</td>
</tr>
</tbody>
</table>

Postsecondary Education Opportunity, Bachelor’s Degree Attainment by Age 24 by Family Income Quartiles, 1970 to 2008.
Lake County: Then and Now

1979
- Power Plant under construction
- Towmotor (Mentor) employs 2,700
- 4% Poverty

1985
- Second core suspended; jobs lost
- Plant closed; jobs lost

2012
- 10% Poverty
- 23,000
About 20% of Lakeland students live in poverty.

69% of 2013 Lakeland graduates received some form of financial aid.
In Ohio, for every 100 students who begin ninth grade:

- Finish high school: 74
- Enroll in college: 44
  - 22 Four-year college
  - 22 Two-year college
- Complete degree within 200% time: 18
  - 14 Four-year college (63%)
  - 4 Two-year college (16%)

Complete College America Ohio Alliance of States, based on institutional reports to US DOE IPEDS, 2 year cohort 2004, four year 2002
Lakeland’s Lowest Income Students Face Unique Challenges

$60,000

Did not receive PELL

Received PELL

$20,000

Average family income

First generation college student

51% 63%

Financial Aid year 12-13
Lakeland’s Lowest Income Students Face Unique Challenges

2012-13 Academic Year (Summer, Fall, Spring)
CONTEXT

WHAT WE KNOW ABOUT OUR STUDENTS AND BARRIERS TO THEIR SUCCESS
To Better Serve Our Students...

... we need to better understand our students.

- We need to understand their complex challenges.
- Lakeland’s students are no different than other two-year college students.
- This population has common characteristics worth closely examining.
What Does Other Research Tell Us?

- Putnam
- Whitehall
- CDC

Can we extrapolate these findings to the work we do?
Growing Class Gaps in the US

- Robert D. Putnam, professor of public policy at Harvard
- Best-selling author:
  - “Bowling Alone: The Collapse and Revival of American Community”
  - “Better Together: Restoring the American Community”
- From Port Clinton, Ohio
- Looked at predictors of success

Growing Class Gap in “Goodnight Moon” Time with Children

Average Daily Minutes of Developmental Care Time With Mothers by Mother’s Education

“By age four, a child from a welfare-recipient family could have heard 32 million words fewer than a classmate from a professional family.”

Growing Class Gap in Enrichment Expenditures on Children

Bottom line: There are growing class gaps among American youth in all predictors of success in life.

“In sum, children from upper/middle class backgrounds are more connected with family, friends, schools and social institutions, while working class children are increasingly more isolated and disconnected from society and its institutions. The very factors on which the youth class divergence is greatest are, themselves, strong predictors of life success.”

Why Does the Class Gap Matter?

Not only is class a predictor of success, class is a predictor of health.
Student Success:
It’s a Matter of Life and Death.
## The Relationship Between SES and Health

<table>
<thead>
<tr>
<th>Area of Health</th>
<th>No High School Diploma</th>
<th>Bachelor’s Degree or Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men 9.3 years less</td>
<td>Men 28%</td>
</tr>
<tr>
<td></td>
<td>Women 8.6 years less</td>
<td>Women 25%</td>
</tr>
<tr>
<td>Life Expectancy for 25 year olds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obesity Rate</td>
<td>Men 34%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Women 43%</td>
<td></td>
</tr>
<tr>
<td>Smokers 25 years old and higher</td>
<td>22%</td>
<td>9%</td>
</tr>
</tbody>
</table>
## The Relationship Between SES and Health

<table>
<thead>
<tr>
<th>Area of Health</th>
<th>Family Income Below Poverty</th>
<th>Family Income 400% of Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of Depression</td>
<td>Four times higher (20 years and older)</td>
<td></td>
</tr>
<tr>
<td>Middle-age and older:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Edentulism (no natural teeth)</td>
<td>23%</td>
<td>5%</td>
</tr>
<tr>
<td>• Two or more chronic conditions</td>
<td>33%</td>
<td>16%</td>
</tr>
<tr>
<td>(heart disease, high blood pressure, stroke, emphysema, cancer, diabetes, asthma, chronic bronchitis, kidney disease)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What Does Other Research Tell Us?

- Putnam
- **Whitehall**
- CDC

Can we extrapolate these findings to the work we do?
The Whitehall Studies

- Conducted in London between 1967 and 1977
- $N = 18,000$ men in the civil service aged 40 to 64
- “The first Whitehall study made clear that inequalities in health were not limited to the health consequences of poverty.”
- “Important as that issue remains, the Whitehall question was why there should be a social gradient in disease in people above the poverty threshold. When conventional risk factors were controlled for, two-thirds of the mortality risk differential between the clerical and administrative grades remained unexplained.”
Strong association between grade levels and mortality rates.

Men in the lowest grade (messengers, doorkeepers, etc.) had a **mortality rate three times higher** than that of men in the highest grade (administrators).

Men in the lowest grade had a higher mortality rate specifically due to **coronary heart disease** than men in higher grades.

Lower grades were associated with higher prevalence of **significant risk factors**: obesity, smoking, reduced leisure time, physical inactivity, underlying illness, higher blood pressure, and shorter height.

Whitehall II revealed correlation between grade and: heart disease, some cancers, chronic lung disease, gastrointestinal disease, depression, sickness absence, back pain and general feelings of ill-health.
We Tend to Think of Education as the Foundation for a Better Life.
“Opportunity Starts Here!”
However...
Self Actualization
Quality of Life
Employment
Education

Academic Achievements
K-12 Experiences
Culture
Values
Childhood Experiences
Family
What Does Other Research Tell Us?

- Putnam
- Whitehall
- CDC

Can we extrapolate these findings to the work we do?
“If risk factors for disease, disability, and early mortality are not randomly distributed, what influences precede the adoption or development of them?”
### ACE Study

- **“Adverse Childhood Experiences”**
- **N = 17,000**
- Survey & physical exam
- One point for each category of trauma

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abuse</td>
<td>- Emotional Abuse</td>
</tr>
<tr>
<td></td>
<td>- Physical Abuse</td>
</tr>
<tr>
<td></td>
<td>- Sexual Abuse</td>
</tr>
<tr>
<td>Neglect</td>
<td>- Emotional Neglect</td>
</tr>
<tr>
<td></td>
<td>- Physical Neglect</td>
</tr>
<tr>
<td>Household Dysfunction</td>
<td>- Mother Treated Violently</td>
</tr>
<tr>
<td></td>
<td>- Household Substance Abuse</td>
</tr>
<tr>
<td></td>
<td>- Household Mental Illness</td>
</tr>
<tr>
<td></td>
<td>- Parental Separation or Divorce</td>
</tr>
<tr>
<td></td>
<td>- Incarcerated Household Member</td>
</tr>
</tbody>
</table>
ACE Study Findings

- Short- and long-term outcomes include health and social problems.
- ACE Score is used to assess the total amount of stress during childhood.
- As the ACE score increases, the risk for health problems increases:
  - Alcoholism and alcohol abuse
  - Chronic obstructive pulmonary disease (COPD)
  - Depression
  - Fetal death
  - Health-related quality of life
  - Illicit drug use
  - Ischemic heart disease (IHD)
  - Liver disease
  - Risk for intimate partner violence
  - Multiple sexual partners
  - Sexually transmitted diseases (STDs)
  - Smoking
  - Suicide attempts
  - Unintended pregnancies
  - Early initiation of smoking
  - Early initiation of sexual activity
  - Adolescent pregnancy
ACE Study Findings, cont’d

- Only 1/3 had a score of 0.
- 2/3 had experienced at least one ACE.
- 1 in 6 people experienced 4 or more.
- These people are us, and our students.
- Compared to those with a score of 0:

<table>
<thead>
<tr>
<th>ACE Score</th>
<th>Likelihood</th>
<th>Adverse Health Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>2+</td>
<td>2X more likely</td>
<td>Autoimmune diseases</td>
</tr>
<tr>
<td>5+</td>
<td>2.6X more likely</td>
<td>Chronic obstructive pulmonary disease (COPD)</td>
</tr>
<tr>
<td>5+</td>
<td>2.4X more likely</td>
<td>Hepatitis</td>
</tr>
<tr>
<td>6+ (Men)</td>
<td>46X more likely</td>
<td>Injected drugs</td>
</tr>
</tbody>
</table>
Therefore

- SES is a consequence or outcome, not a cause.
- People don’t decide NOT to go to college (or to drop out) as a result of their SES, but SES is a predictor of factors in their lives leading to those decisions.
  - Factors such as fear, stress, self-view
Students in the lowest SES quartile have greater outside commitments with fewer resources than the highest quartile.

Lakeland provides education, in part, to lead students to jobs - which has downstream implications for their children being able to come out of this quartile / track.

Helping people out of poverty doesn’t take away the long-term implications of ACE, but it can provide tools for coping and help to abate issues going forward.
It’s not just about poverty; it’s about STRESS.
Continuous Toxic Stress

- There are developmental differences which can impact the function of the prefrontal cortex in low SES children. Impacts ability to learn.

- Among children, SES correlates with the ability to pay attention and ignore distractions.

- Prolonged trigger of “fight or flight” reflex – Leads people to OPT OUT.

Adverse Childhood Experiences (ACE)

Disease, Disability, & Social Problems

Adoption of Health-risk Behaviors

Social, Emotional & Cognitive Impairment

Employment

Quality of Life

Self Actualization

Less Adverse Childhood Experiences

Adverse Childhood Experiences (ACE)
Student Success:
It’s a Matter of Life and Death.
So What?
When our students succeed...

... their kids succeed.
• Lakeland has historically focused on enrollment and completion.

• Previously, entering students could have been viewed as being at the starting point of their journey.

• More and more, the College considers the factors that bring students to our doors – or those factors that keep potential students away.

• Who are they when they come to campus?
Class Gaps in Connectedness and Trust

“... As physicians, we typically focus our attention on tertiary consequences, far downstream, while the primary causes are well protected by time, social convention, and taboo. We have often limited ourselves to the smallest part of the problem, that part in which we are erudite and comfortable as mere prescribers of medication or users of impressive technologies.”

Actions

- Expand medical questionnaire
- Retrained examiners to address the issue
  - “I see that you have experienced XYZ. Tell me how that has affected you later in your life.”

Results

- 35% reduction in doctor office visits
- 11% reduction in ER visits
- 3% reduction in hospitalizations

Conclusion

“The enlightened witness” works.

“It depends on your time horizon.”

- Elinor Ostrom
2009 Nobel Laureate
Our “Community” Commitment

As a community college, we serve the community.

Not just the community of TODAY, but the community of the FUTURE.
Our Reality

- What our students bring with them from their lives WILL drive their results.
- The better we understand their lives, the better our chance to influence their success.
- Our community needs to understand the challenges our students face, and thereby the challenges we face.
CONTEXT

WHAT WE DON’T KNOW ABOUT OUR STUDENTS AND BARRIERS TO THEIR SUCCESS
Research tells us…

• There are growing social class gaps in factors that predict success.
• Social class is correlated with stress and health problems.
• Stress can kill you. It can hurt your kids.

Intervention is key.

• We serve the economic & social needs of the community.
• Stress and early death are economic and social problems.

Therefore, we need to take action.
We need a better understanding of the causes of student failure.

It’s not just what happens on our campus.
# 2012 Incoming Cohort

<table>
<thead>
<tr>
<th>Count</th>
<th>Description</th>
<th>Stats</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,403</td>
<td>Started: Full- &amp; Part-time</td>
<td></td>
</tr>
<tr>
<td>763</td>
<td>Dropped out after one year</td>
<td>54%</td>
</tr>
<tr>
<td>250</td>
<td>Completed 60 credit hours in four years</td>
<td>18%</td>
</tr>
<tr>
<td>160</td>
<td>Completed degree in four years</td>
<td>11%</td>
</tr>
</tbody>
</table>
## 2012 Incoming Cohort

<table>
<thead>
<tr>
<th>Count</th>
<th>Description</th>
<th>Percentage</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,403</td>
<td>Started: Full- &amp; Part-time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>378</td>
<td>Low Income &amp; Requiring Dev. English</td>
<td></td>
<td></td>
</tr>
<tr>
<td>248</td>
<td>Dropped out after one year</td>
<td>67%</td>
<td>(54%)</td>
</tr>
<tr>
<td>33</td>
<td>Completed 60 credit hours in four years</td>
<td>9%</td>
<td>(18%)</td>
</tr>
<tr>
<td>27</td>
<td>Completed degree</td>
<td>7%</td>
<td>(11%)</td>
</tr>
</tbody>
</table>
• If we raise our awareness of our students’ prior experiences, we can adjust our behaviors, practices and policies to best serve them.

• We can allow this to inform how we interact with students.

• The more we can pull people into the left-hand pyramid, the better chance for future opportunities AND, just as importantly, future generations.
To Do

✓ Develop strategies for moving forward
✓ Learn more about our students and their lives
✓ Broaden the understanding
✓ Make informed changes to public policy
Thank You