

Promoting employment skills to high school students:

Implementation of Florida's
Career and Professional Education Act

Elizabeth Glennie, Erich Lauff, Randy Ottem

Florida
Industry
Certification
Study



Demand for postsecondary credentials

- Jobs increasingly call for credentials beyond a high school diploma.
- Not all students seek 4-year college degree
- Nationally recognized, independently created industry certifications are one path forward.
- Many states are finding ways to promote industry certifications to students.
- In 2017, 39 states had some formal policy associated with industry-recognized credentials (ACTE 2017).

Florida's Career and Professional Education (CAPE) Act

- Established 2007 to provide rigorous, relevant coursework leading to industry certification and college credits.
- State approved industry certifications
 - Critical to FL employers
 - Achievable by secondary school students
 - Require a minimum of 150 instructional hours
- In 2017-18
 - 236 specific certifications nested in 12 career areas

Incentives for earning certifications

- Students and families do not
 - pay for examination costs
 - schedule examination
 - arrange transportation to examination site
- Students do
 - receive relevant school-based instruction
 - get the potential for college credit via some certifications
- Schools get points in School Report Card
 - Number of students taking exams
 - Number of students passing exams

How do schools promote certifications?

- Exploratory examination of promotion
 - How do Florida high schools promote industry certifications?
 - Do strategies for promoting certifications differ by school context?
 - Do Florida high schools emphasize specific career areas?
 - Do reasons for emphasizing areas differ by school context?

2018 – Web-based school survey

- One response per eligible school
 - Each traditional/vocational high school with at least 10 students in membership, 5 in 12th grade
- Of 524 eligible schools, 399 (76%) responded to the survey.
- Respondents were principals, CTE leaders, curriculum coordinators.

School context

- Locale
 - City, Suburb, Rural/Town
- Poverty-level – based on free/reduced-price lunch
 - Low-poverty: < 25% students eligible
 - Middle-poverty: 25-75% students eligible
 - High poverty: More than 75% students eligible
- 2017 certification rate – based on % 9th grade (2013-14) earning certifications by 2016-17.
 - Low certification rate: < 10% students
 - Middle certification rate: 10-25% students
 - High certification rate: more than 25% students.
- Test differences – t-test with Benjamini-Hochberg adjustments for multiple comparisons.

Do schools offer industry certifications?

Percentage of schools offering certifications by school characteristic

Locale



Poverty-level



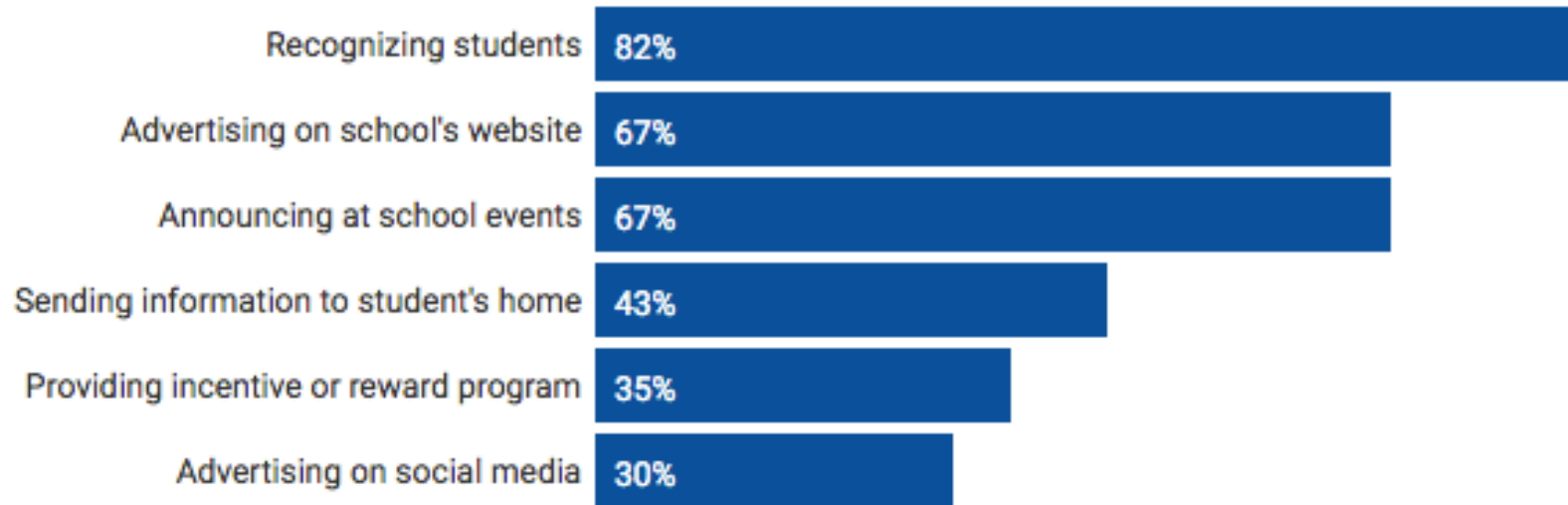
Past certification rate



Source: Florida Industry Certification Study - Created with Datawrapper

How do schools promote certifications?

Strategies for promoting certifications to students



Note: Because respondents could choose more than one strategy, percentages do not total 100%.

Source: [Florida Industry Certification Study](#) • Created with [Datawrapper](#)

Do promotion strategies vary by school context?

- Strategy doesn't vary by school context
 - Low-certification-rate schools use almost every strategy less frequently than high-certification-rate schools

Career areas of certifications

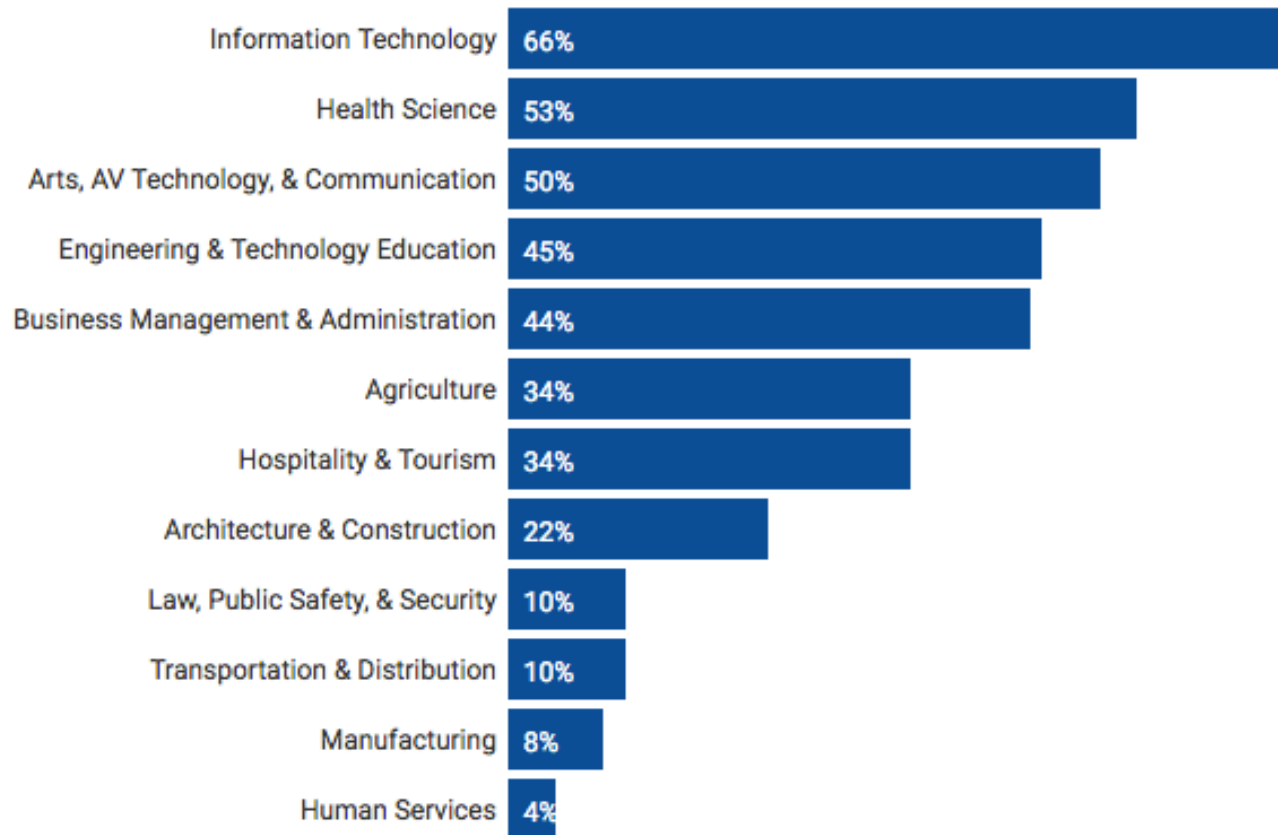
- Agriculture
- Architecture & Construction
- Arts, AV Technology, & Communication
- Business Management and Administration
- Engineering & Technology Education
- Health Science
- Hospitality & Tourism
- Human Services
- Information Technology
- Law, Public Safety & Security
- Manufacturing
- Transportation & Distribution

Do schools emphasize certain career areas?

- Of schools offering certifications, 64% emphasize a given area.
- No real differences by school type

Which areas do schools emphasize?

Of those emphasizing any career area, the percentage of schools emphasizing each one

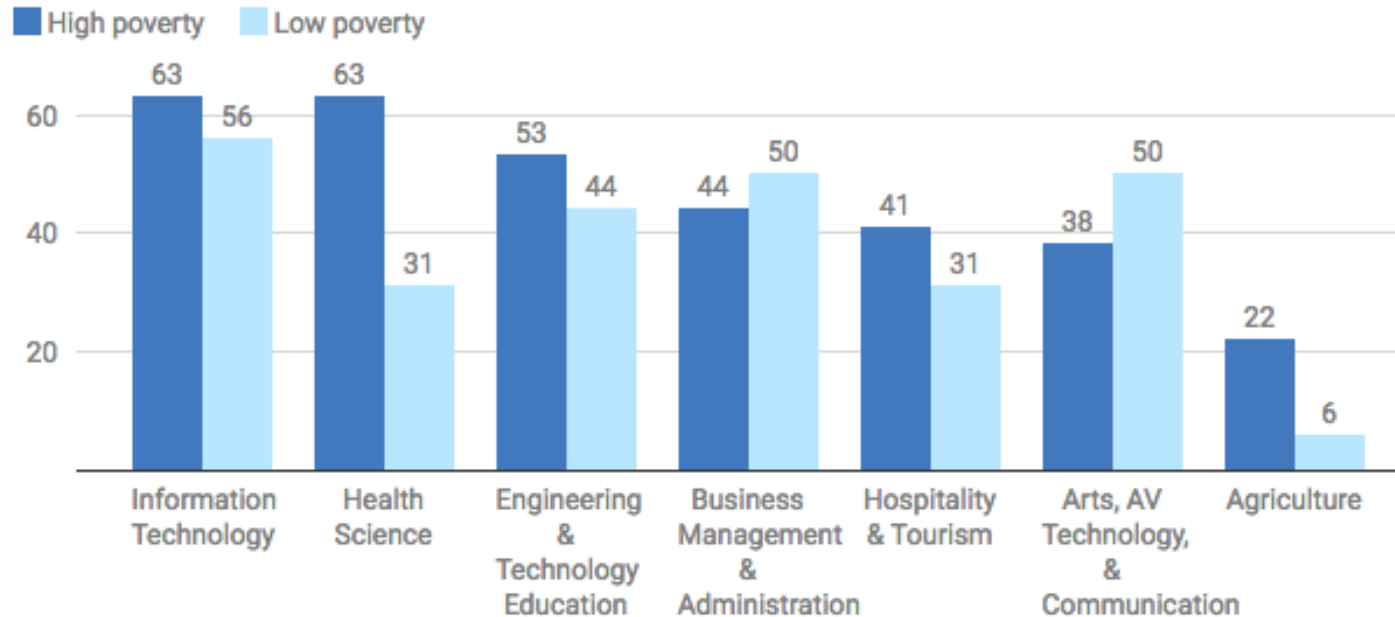


Note: Because respondents could choose more than one area, percentages do not total 100%.

Source: [Florida Industry Certification Study](#) • Created with [Datawrapper](#)

Which areas to schools emphasize?

Schools emphasizing career areas: Comparison of high-poverty and low-poverty schools

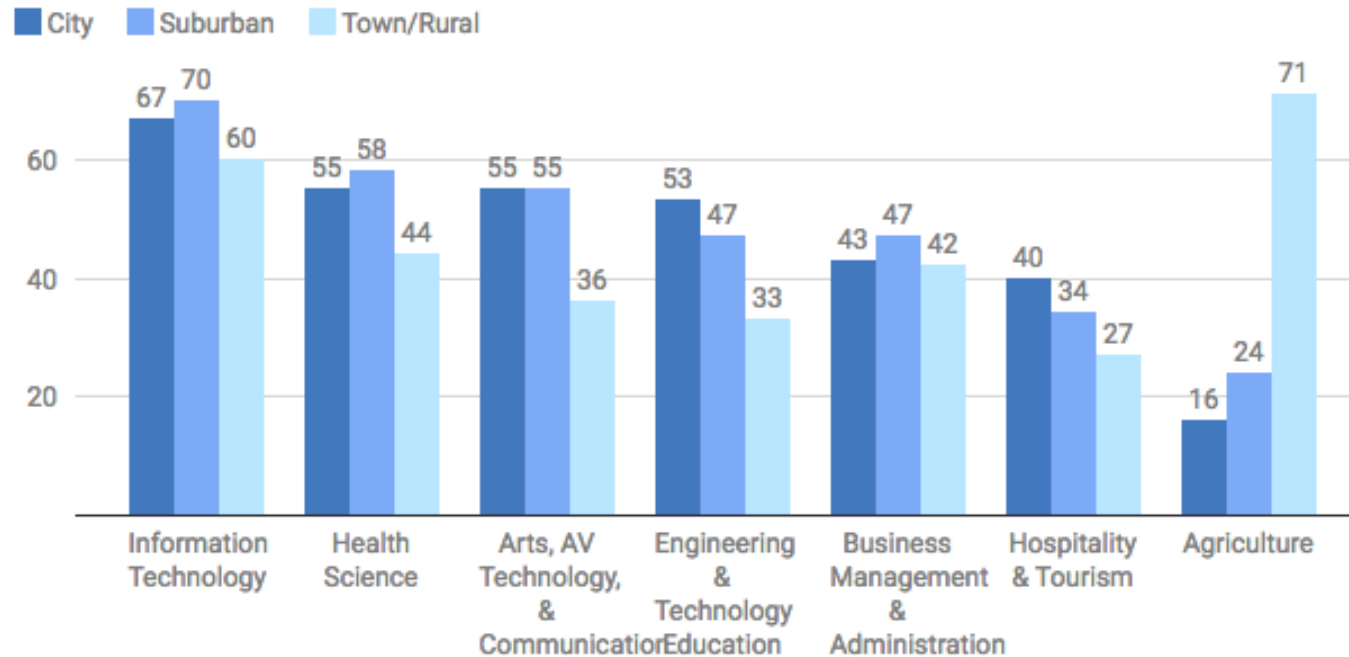


Note: Because respondents could choose more than one area, percentages do not total 100%. This comparison only includes areas that were emphasized by at least 25% of schools.

Source: Florida Industry Certification Study • Created with Datawrapper

Which areas do school emphasize?

Schools emphasizing career areas: Comparison by locale

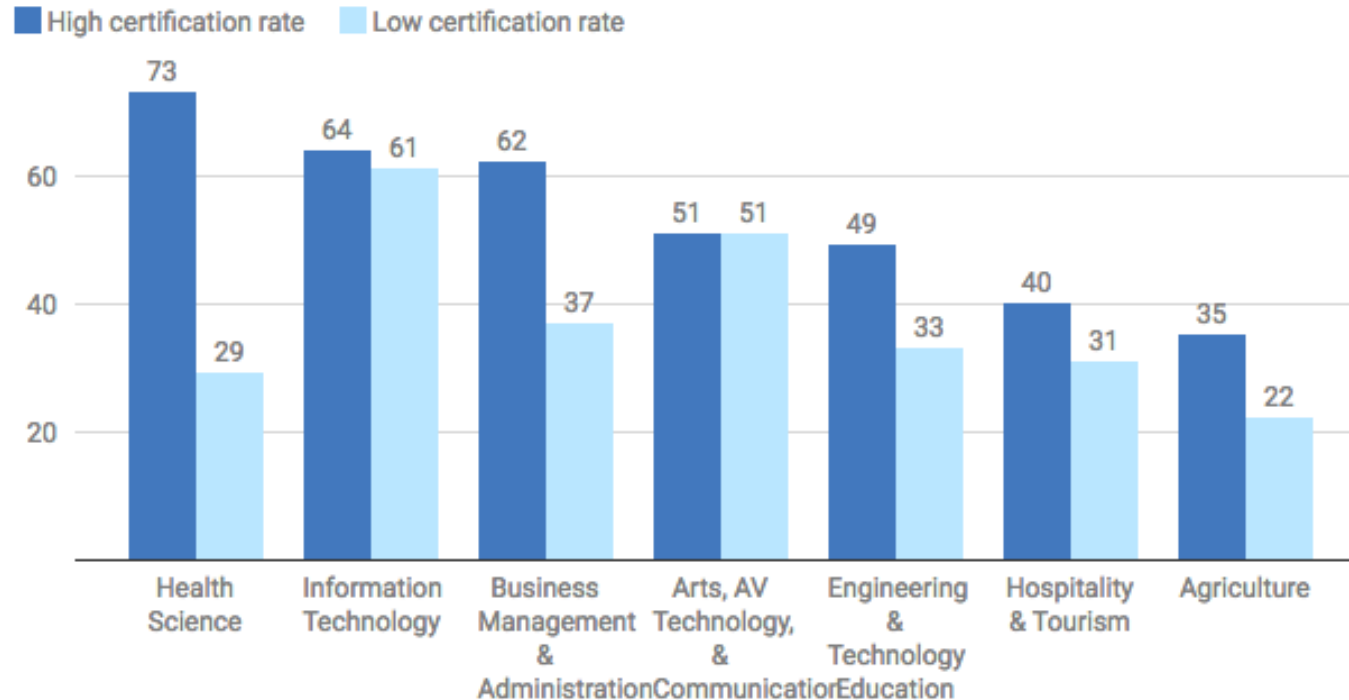


Note: Because respondents could choose more than one area, percentages do not total 100%. This comparison only includes areas that were emphasized by at least 25% of schools.

Source: Florida Industry Certification Study • Created with Datawrapper

Which areas do schools emphasize?

Schools emphasizing career areas: Comparison of high-certification-rate and low-certification-rate schools



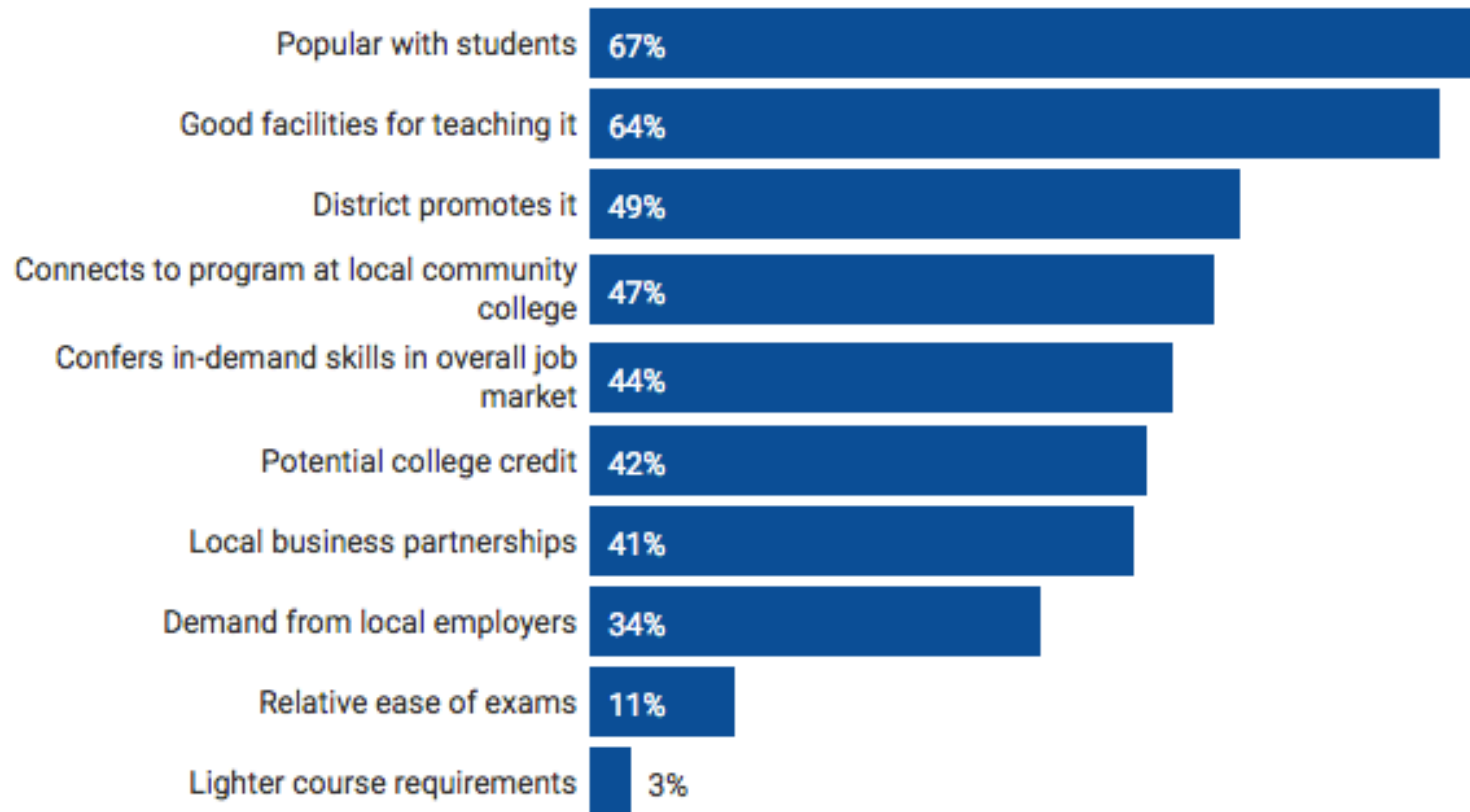
Note: Because respondents could choose more than one area, percentages do not total 100%. This comparison only includes areas that were emphasized by at least 25% of schools.

Source: Florida Industry Certification Study • Created with Datawrapper

Why do schools emphasize certification areas?

- High school experience
 - Popular with students.
 - District promotes it.
 - School has good facilities.
- Ease of process
 - Lighter course requirements
 - Ease of exam
- Jobs
 - School has business partnerships.
 - General demand - local employers.
 - In-demand skills in overall job market.
- College access
 - Connects to community college/technical
 - Provides potential college credit.

Reasons for emphasizing career areas



Note: Because respondents could choose more than one reason, percentages do not total 100%.

Source: [Florida Industry Certification Study](#) • Created with [Datawrapper](#)

Differences by school type in reasons for emphasizing areas

Differences of at least 10 percentage points					
Reason	High-poverty minus Low-poverty	City minus Rural	Suburb minus Rural	City minus Suburb	High-certification-rate minus Low-certification-rate
SCHOOL					
Popular with students	-16				
District promotes it	28				14
Good facilities for teaching it					18
JOB					
Local business partnerships	19				22*
Demand – local employers	31				10
Skills - overall job market	22	15	-16	31	
COLLEGE					
Potential college credit	25				15
Community college		15	12		12
EASE OF PROCESS					
Lighter course requirements	16				
Relative ease of exams	10				-11

- Source: 2018 Florida Industry Certification Study school survey, Florida Department of Education, Education Data Warehouse, CCD PSU 2014-15. *Result was significant after Benjamini-Hochberg adjustments for multiple comparisons.

Conclusion

- Almost all schools offered certifications to their students.
- Across school contexts, promotion strategies and reasons for promoting particular areas were similar.

- Yet – high-poverty schools seem more engaged
 - higher rates of offering certifications and identifying future-focused reasons for emphasizing areas
- By locale,
 - City and rural schools consider local labor market more than suburban schools.
 - Rural schools emphasize different areas than suburb and city schools.
- By past certification level,
 - Low-certification-rate schools less frequently use every promotion strategy or reason for emphasis. Perhaps staff don't quite understand the benefits of certifications.

Future work

- In what other ways to schools and districts manage the certification program?
- What other school factors influence implementation strategies?
- How does local labor market demand influence implementation?
- What is the association between implementation strategies and certification outcomes?
- Are implementation strategies are more effective for some groups of students?



delivering **the promise of science**
for global good



Elizabeth Glennie

eglennie@rti.org

919.541.6434

This work was funded by IES Grant
#R305A170222