What is the effect of research opportunities in retention and graduation rates?

<table>
<thead>
<tr>
<th>Problem</th>
<th>How RESEARCH can HELP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of financial resources</td>
<td>Stipends, work experience</td>
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<tr>
<td>Feelings of Isolation</td>
<td>Sense of belonging. Belonging improves motivation. Students also realize that their role models (faculty/postdocs) have expectations from them. Students respond excellently after realizing that somebody believes and expects results from them.</td>
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<tr>
<td>Academic deficiencies</td>
<td>Research is a learning opportunity, it is an excellent way to instill a self driven personality</td>
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<tr>
<td>Relevance of their study</td>
<td>Clarification of their educational goals, Innovation, an opportunity to benefit society</td>
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Research teaches that success is not a result of luck; hard work and opportunities have to co-exist.
The opportunity to have “hands on” research experiences helps students to:

Become aware of latest technology breakthroughs
Develop critical thinking skills
Learn complex concepts
Develop writing, communication and presentation skills
Face failure and solve problems (ample opportunities)
Design a path for success
Function independently
Develop time management skills
Establish a personal connection to their job
Add years of working experience
Students also have an opportunity to further develop:

- Work ethics
- Discipline
- Responsibility
- Persistence
- Determination
How to design effective opportunities?

• Willingness to mentor

• Feasible projects

• Opportunity to develop practical applications

• Innovative
How about motivating students to develop research projects or innovative mindsets?

The EXPLORAVISION Method:
Invent a product, system, method….that is not possible now but could exist 20 years from now

Present Tech

Future Tech

Design Process

Bibliography

History

Breakthroughs

Consequences

Graphics
https://youtu.be/ZU9PdNzI LN s