

Role of Academia-Industry in Project based Learning

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• Aim:

- To impart academic and business oriented learning among students.
- To provide exposure for solving real world problems.
- To inject entrepreneurship and technical skills.

• Overview

- The partnership of Industry-Academia provides a unique platform for learning. This type of learning provides real-world context and is viewed as a critical part of undergraduate education in general, and engineering degrees in particular [1-2].
- The Industry-Academia collaboration plays a vital role in improving the academic performance of the student, if he completes Capstone projects based on real world problems [3].
- The undergraduate students receive technical assistance in the academia, due to the guidance of professors. However, they do not receive any technical support as an expert role in the industry. Thus, the project based learning under the mentorship of Industry-Academia partnership will benefit the student in achieving best academic results [4].
- The studies observed improvements in professional skills associated with industry based projects [5], and impact on cooperative experiences for technical and organizational skills [6].

Proposed methodology

- The academia and industry can collaborate by developing the project in order to provide the solution for real world problems. It will be better if problems are based on national interest and capable to generate funds.
- The academic partner can frame the technical details of the project with research outcomes and can prepare a detailed execution plan.
- The industry partner can focus on the business angle of the project. This will include identification of customers, go-to-market strategy and planning for generation of revenues from the products developed from the project.
- The small modules of the project can assigned to students as Capstone project. The students can implement these modules in a team. This team requires technical training for the implementation.
- The training can be provided by the professors with proper guidance. Hence students will be able to learn advanced technologies to solve real world problems.
- The students will allowed to interact with both academic and industry partner during the implementation of the capstone project. This will lead to enhancement in technical, professional, entrepreneurship skills.

• Impact

- A study has been conducted on more than 15,000 students and it has been observed that the students achieved better academic results by doing industry based real world projects [3].
- The learning from the projects based on academic and industry collaboration provides

exposure of both research and business.

- This helps in preparing the students as industry with expert on specific technology.
- The student will be benefitted from Industry experience and creating the business for funds.
- The will be helpful in development of the Nation and is of National interest.

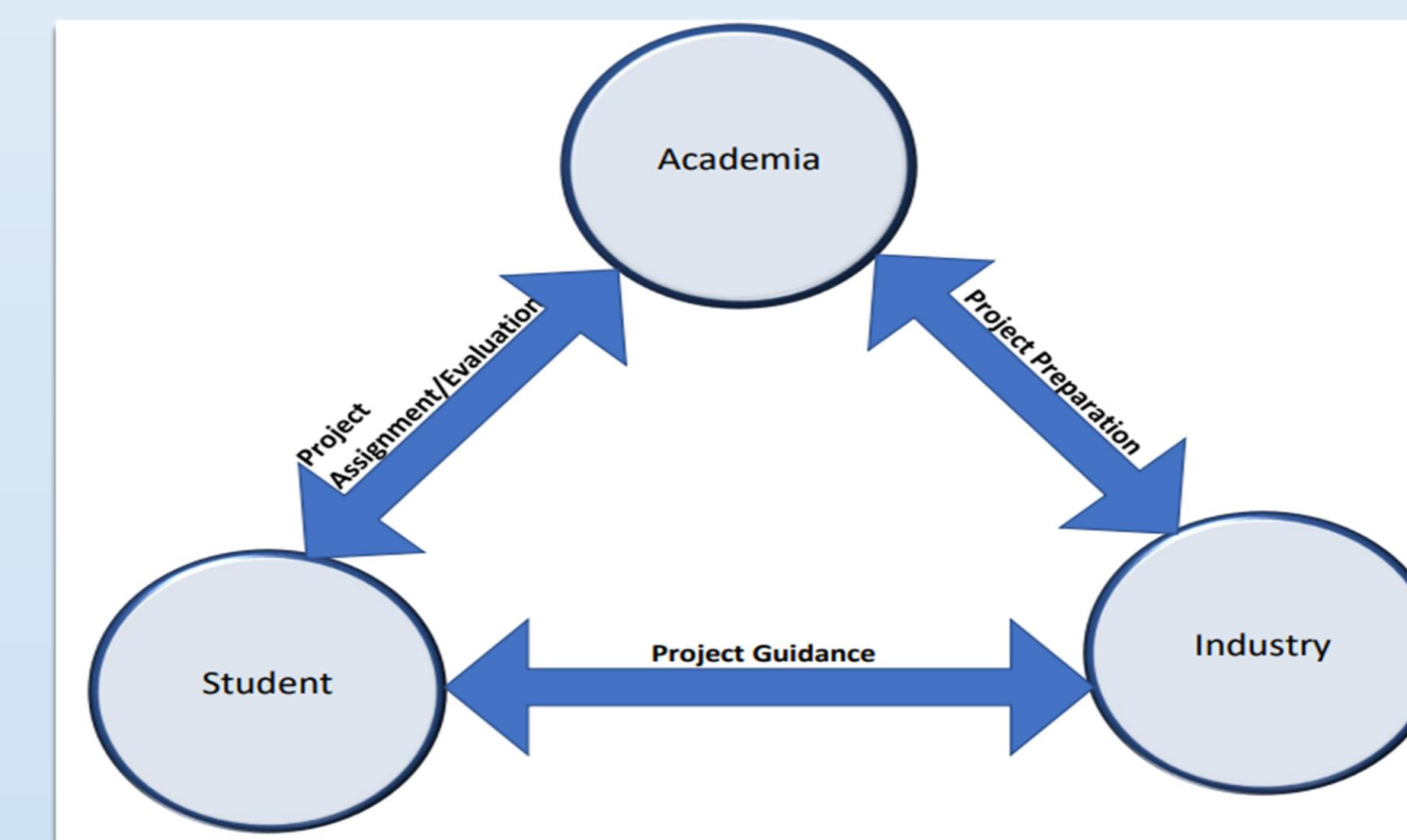


Fig.1 The process flow of the proposed methodology

Strength: Advanced and fast learning with multidimensional exposure and improvement in skills.

Limitation: The industry and academic collaboration depends on the quality of the project.

• References

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