give | grants

Impact Assessment Report

Wipro Integrated Learning Program

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List of Acronyms

IoE	Institute of Eminence
LFA	Log Frame Analysis
WILP	Work Integrated Learning Program
WASE	Wipro Academy of Software Excellence
WIMS	Wipro Infrastructure Management School
SDGs	Sustainable Development Goals
TOC	Theory of Change

1 Executive Summary

The global IT/ITeS industry is expanding at an exponential rate, and India is one of the leading countries that cater to this growing demand. To bridge the gap between the demand and supply of skilled professionals, Wipro started the Work Integrated Learning Program (WILP) by offering Wipro Academy of Software Excellence (WASE) and Wipro Infrastructure Management School (WIMS) programs. WASE and WIMS as Work Integrated Learning Program (WILP) programs have been offered for over two decades now. WASE was the first WILP program, having eminent people in the industry graduating from it. WILP focuses on practical-based or hands-on project-based learning that allows students to work on a real-time problem/solution while attending classes physically. WILP also provides students with an opportunity to pursue M.Tech from BITS Pilani, which is an Institute of Eminence (IoE), making it the only program in the current ecosystem where BCA/B.Sc. graduates can pursue an M.Tech degree

Over the years, WILP has successfully created a pool of skilled professionals who have contributed significantly to the growth of the IT industry. However, to enhance the learning experience further, we recommend introducing self-help courses/techniques for students to manage their workload and maintain their mental well-being. We also suggest switching to an in-person classroom model and making labs compulsory for students to facilitate practical-based learning. Further, we recommend facilitating alumni-current students meeting to create a networking platform for students to connect with alumni and learn about their experiences in the industry. This will help students to gain insights and prepare them for their future careers.

The effort of Wipro directly addresses SDG 4 and 8 of the UN SDGs, Agenda 2030. Nationally, it targets activity (ii) of Schedule VII of the Companies Act, 2013.

The impact assessment of WILP was conducted to ascertain the students' perspective of the course, their motivation to join, their take on the value of the M.Tech degree that will be conferred with and understand the cursors to continue with Wipro or move outside for career prospects. A logical framework analysis was laid against the expected theory of change, to understand the parameters, indicators, output, outcome, and overall impact. A mixed method approach was adopted that involves combining both quantitative and qualitative methods to gain a deeper understanding of a research problem.

The total sample size of 721 direct and indirect beneficiaries along with Wipro location managers and BITS Pilani were considered for the assessment. The team of Give interacted with 400 ongoing students from second, fourth and sixth semesters, 200 alumni, and 32 parents. The Give team conducted in-depth Key Informant Interview (KIIs) with Wipro Location Manager, WILP Program Manager and faculties of BITS-Pilani, in determining the impact of the project's interventions.

The highlights of the findings from the assessment are presented in the table below:

	Parameters	Give's Observation
1	USP of the program	• Program benefits the students, their families and the companies who recruit them post the completion of the program. • The program provides opportunity to B.Sc./BCA students. to work in larger organizations or gain exposure to different domains which otherwise they would not have been able to. • B.Sc./BCA students can earn an M.Tech from an 'Institute of Eminence' - BITS Pilani • 66% alumni state that program helps to diversify the industry exposure and hands-on experience of working on ongoing projects.
2	Motivation to join the program	• Earn while learning is the major attraction of the program • Higher studies from a post-graduation perspective M.Tech degree from BITS-Pilani
3	Value of M.Tech degree conferred	• 90.2% of ongoing students believe M.Tech degree holds value in the market. • Most of the alumni affirmed the value of the M.Tech degree conferred to them. • 96.7% of parents of the students believe the M.Tech degree holds value in the market.
4	Classroom Infrastructure & Classroom Experience	• 99% of alumni state that Wipro Academy has 'state-of-the-art' infrastructure required for the program. • 97.3% of ongoing students have stated having sufficient instructors for the course. • 89.3% of students find classroom experience as 'excellent' or 'very good'.
5	Reasons for moving on after M.Tech degree	• Compensation package: While 91.2% of alumni interacted with work in Wipro, the ones working elsewhere stated compensation as a decisive factor in moving on. • Work-life balance • Want to experience the working culture of other eminent MNCs.

It is noticeable to say that the WILP by Wipro Ltd offers a unique opportunity for students to gain practical experience while pursuing their education. The WASE and WIMS programs are designed to provide students with a blend of theoretical and practical knowledge, making them industry-ready professionals. The program has been successful in bridging the gap between academia and industry, and several students who have completed the program have secured placements with top IT companies. The WILP is an excellent initiative that offers a win-win situation for both students and the industry.

2 Introduction

The Work Integrated Learning Program (WILP) by Wipro Ltd is an initiative that aims to bridge the gap between academia and industry. The program provides an opportunity for students to gain hands-on experience and develop practical skills while pursuing their education. Wipro Ltd offers two programs under the WILP - WASE (Wipro Academy of Software Excellence) and WIMS (Wipro Infrastructure Management School). Both these programs are designed to offer students a blend of theoretical and practical knowledge and prepare them for a successful career in the IT industry. These programs are four- year WILP program offered in collaboration with BITS-Pilani.

WASE:
Wipro Academy of Software Excellence (WASE) aims to groom fresh graduates into industry-ready professionals. WASE students undergo rigorous training in various software technologies, soft skills, and business communication. They work on real-time projects alongside industry professionals, giving them an opportunity to apply their theoretical knowledge in a practical setting. The program is structured in a way that enables students to earn their degree while gaining valuable work experience.

WIMS:
Wipro Infrastructure Management School (WIMS) focuses on providing students with in-depth knowledge and practical skills in the field of IT infrastructure management. WIMS students undergo training in various IT infrastructure management technologies, soft skills, and business communication. They also work on real-time projects alongside industry professionals, giving them hands-on experience in managing complex IT infrastructure. The program is designed to prepare students for a successful career in the IT infrastructure management domain.

3 Objectives and Scope of Study

The study aims to understand the perceived value of the degree by the students, it is relevance in the market and willingness to be referred to larger citizens to hone and opt for a career in IT/ITeS sector. The impact assessment tries to map the programimplementation against the plan and draws focus on how the interventions have helped the students to gain traction in IT/ITeS career as a result of M.Tech degree through WILP.

3.1 Objectives of the Study

The major objectives of the study are as follows:

- **Assess the relevance and efficiency of the intervention** by ensuring that beneficiaries challenges are addressed by the project and to review the implementation pathways - assessing process and activities
- **Understand the effectiveness of the intervention**: How each activity has led to creating the desired outcomes
- **Understand the major success factors and challenges** in the intervention
- **Find the areas of improvement** across all the factors from program design to implementation
- **Provide an assessment framework** to be able to capture impacts in a manner that is effective recommendation

3.2 Limitations of the Study

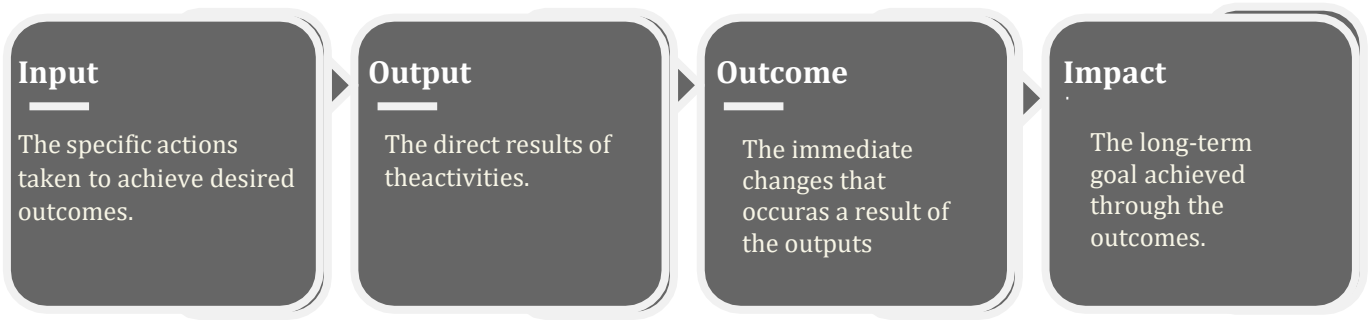
- The interaction with ongoing students, alumni and parents being a virtual one, the triangulation of actual impact on ground failed to happen.
- Only around 10% of alumni working in other companies could participate in the assessment.
- Ongoing students remained hesitant to connect us with their parents.

4 Assessment Framework

To create an overall framework for the impact assessment, the following activities were undertaken. We began by establishing the scope of the assessment in terms of the type of stakeholders to be engaged and topics to be discussed with them. Based on this and the understanding of the project activities, we developed stakeholder-wise detailed questionnaires to ascertain factors including rationale for the program, the implementation process, roadblocks in operations and beneficiary (ongoing students, alumni, and parents) feedback about the efficacy of the program. The findings and recommendations arising out of this process are mentioned in the subsequent sections of the report.

4.1 Theory of Change

Theory of change is a comprehensive explanation of how a desired change is expected to happen in a particular context, through a logical and evidence-based framework that links inputs, outputs, outcomes, and impact. TheTheory of Change Framework (ToC), for the given program is illustrated below:



Theory of Change (ToC) (For FY 2020-21)				
Need	**Input**	**Output**	**Outcome**	**Impact**
Provide IT/ITeS sector with youth possessing sectoral employable skills	• Selection of students • Identification & selection of Wipro Employees as course instructors • Identification & selection of BITS Pilani instructors • Provision of classroom infrastructure, lab facilities • Revision of module and curriculum per the market requirements	• Students working on a hand-on project • Understanding of requisite courses for M.Tech degree	• Students have experience while obtaining M.Tech degree • Students are market ready and employable • Students start becoming financial independent or able to bear the responsibility of financial dependence.	• Immediate Impact • Students are mainstreamed in the STEM education • Program offers constant pool of talent that are experienced and possess required skills for the sector • Improvement in financial standing of the students' families

4.2 Logical Framework Model

A LOGICAL FRAMEWORK MODEL is created against the identified ToC to reflect the identifiable indicators,means of verification, and assumptions, as given below:

Log Frame Analysis (LFA)				
	Project Summary	**Indicators**	**Means of Verification**	**Assumptions**
Impact ↓	• Students are mainstreamed in the STEM education • Program offers constant pool of talent that are experienced and possess required skills for the sector • Improvement in financialstanding of the students'families	• Number of students graduated • Number of students hired by other companies • Number of students continuing working in Wipro	• One-on-one interaction with alumni • KII with parents, and Wipro centre leads • M&E of the program carried out batch-wise	• All the students enrolled do not drop-out and attain M.Tech degree
Outcomes ↓	• Students have experience while obtaining M.Tech degree • Students are market ready and employable • Students start becoming financially independent or able to bear the responsibility of financial dependence.			
Output ↓	• Students working on a hand-on project • Understanding of requisite courses for M.Tech degree	• Student's job role and tasks assigned • Students attending classes	• Student interaction	• Students are able to manage work and studies meticulously

Input 	• Selection of students • Identification & selection of Wipro Employees as course instructors • Identification & selection of BITS Pilani instructors • Provision of classroom infrastructure, lab facilities • Revision of module and curriculum per the market requirements	• No. of students enrolled • No. of students attending classes • Students approaching for solution or a query as part of their learning • Number of students using lab facilities	• Beneficiary surveys	N.A

4.3 Three Point Assessment Framework

Based on the TOC and the LFA created, we examined the relevance of services, the preparedness for program activities, qualitative and quantitative assessments, efficiency, and effectiveness of delivery of services as well as any innovations that may have been implemented on the ground.

The impact assessment findings are further anchored around **Give's Three-point Assessment Framework** as illustrated here.

Program Design

We studied program design through program strategies, inputs and resources, assumptions, outreach mechanisms, and much more. We also consider if the program design attends to specific needs of the stakeholders, program locations,social categories, site, and situation, among other development needs. Give's Impact Assessment approach for program design is based on Assessment criteria like Relevance and Preparedness using methodologies such as assessment of baseline survey.

Program Delivery

Give assesses the Program Delivery to understand the success of the program delivery mechanism in attaining the overall objectives such as cost effectiveness, resource efficiency, equity in service delivery, best practices and challenges, perception about the services among the relevant stakeholders, amongother actors.

Impact

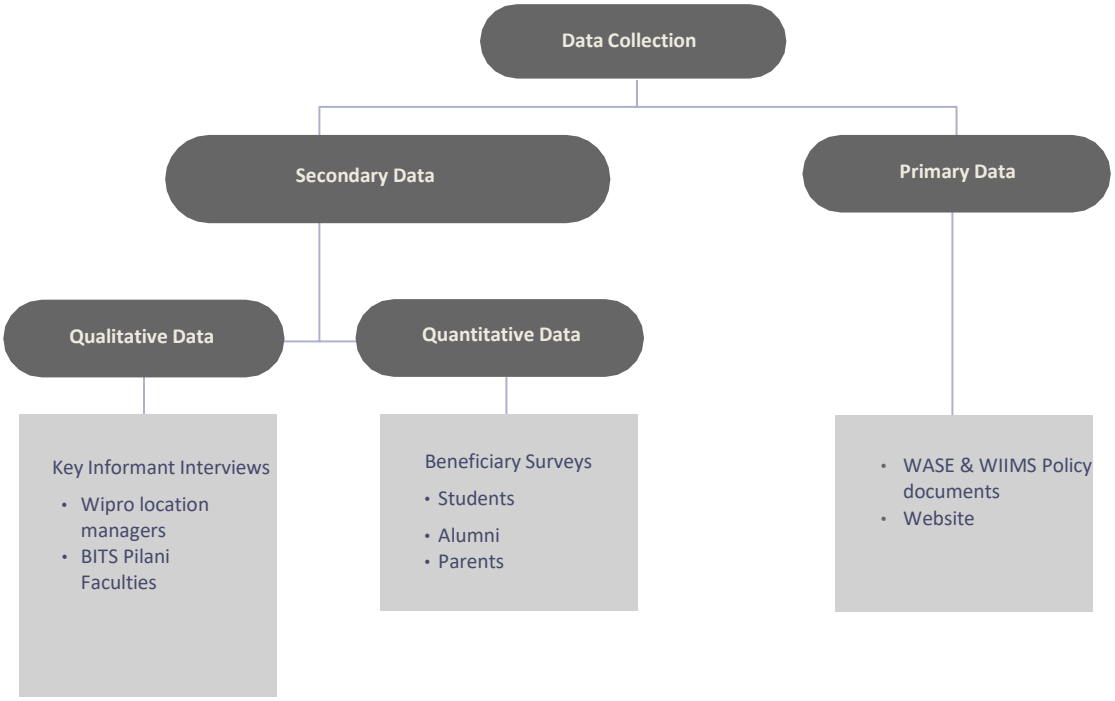
The program's impact potential was assessed to ascertain whether a change or the desired outcome can be attributed to the program intervention. Give uses criteria such as scale of Impact and impact sustainability to understand the impact potential of the projects.

5 Methodology Adopted

We initiated the impact assessment study by identifying the key stakeholders for the project. These stakeholders were ratified in consensus with the implementing partner. The study takes a 'mixed method' approach which includes both qualitative as well as quantitative data capture and analysis.

The quantitative tools provide values to key indicators related to access, awareness, quality. It also maps the outputs against the targets and outcomes perceived by the beneficiaries. On the other hand, the qualitative method and approaches provide a better understanding and help to build a storyline for the achievements and gaps in the program from the lens of immediate stakeholders involved in the program implementation, other than the beneficiaries. A qualitative study gives substantiated evidence for a better understanding of the processes involved in the program implementation. Thus, the 'mixed method' approach also helps in developing a framework for gap identification and course correction.

5.1 Data Collection



Primary Data: Primary data is the key to collecting first-hand information as evidence from the beneficiaries and stakeholders on the interventions. It allows us to understand the benefits delivered, its effectiveness and key challenges to assess the impact created by the program and arrive at recommendations that enhance it.

Secondary Data: For secondary data collection, the program proposal, MoU, and annual and quarterly program report were referred. These documents gave high level insights about the projects including the inception and implementation phase along with the processes followed.

5.2 Sampling Strategy

The WILP program by Wipro Ltd has been functional for 25 years. It started with bridging the gap need of IT/ITeS industry with now focusing on ensuring the talent edge that youth in India possess in this domain. Considering a confidence interval of 95%, and 5% allowable margin error, the study planned for data collection for WASE & WIMS programs were:

#	Program	Sample Size
1	WASE	357
2	WIMS	364
	Total	721

The interactions with direct beneficiaries comprising of ongoing students and alumni and, an indirect beneficiaries comprising parents of these students were conducted virtually as telephonic surveys. The key informant interviews were scheduled for Wipro location managers and faculties of BITS Pilani.

The following formula details out the sample size calculation process with the assumptions considered.

$$\text{Sample size} = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N}\right)}$$

- N = Total stakeholder population
- z = Z Score (Z-score is the number of standard deviations a given proportion isaway from the mean and 1.96 here corresponding to a 95% confidence interval)
- e = Margin of Error (Percentage in decimal form; here taken as 0.05 (+/- 5% error)
- p = sample proportion (0.5)

The sample size of ~711 was distributed among the ongoing students, alumni, and parents respectively. For the quantitative data collection, we created representative and stratifiedsamples to ensure accurate results.

The following table elaborates the sample size and distribution as per the strategy.

Stakeholders	Sample size planned	Sample size achieved	Mode of interview
Students	400	400	Telephonic
Parents	111	32	
Alumni	200	200	
Total	**711**	**632**	

632 interactions were recorded against the planned sample size of 721 over a period of three weeks from 27th March to 17th April 2023.

Key informant interviews: Questionnaires were designed for each stakeholder interview. All relevant questionswere asked to the respondents and were captured. This was done through purposive sampling.

Stakeholder Group	No. of Interviews (Planned)	No. of Interviews (Achieved)	Mode of interview
Wipro Location Managers	5	5	Virtual (Google Meet)
BITS Pilani Faculties	5	5	
Total	**10**	**10**	

6 Analysis & Findings

Descriptive statistic (basic features of the data including frequencies, counts, percentages), comparative analysis (before and after comparisons), and content analysis (for qualitative data to interpret and analyze unstructured textual content into manageable data) were done to analyze and interpret the data collected.The findings for the program are organized as per the three-point assessment framework described earlier.

Basic Profile of Students

The profile of the students enrolled in the program is diverse, with a sizable number of students coming from BCA and various B.Sc. streams. The statistics suggests, 47.7% of the students enrolled in the program have completed their BCA, while 46.8% of the students come from different B.Sc. streams as illustrated in Figure 1(a).

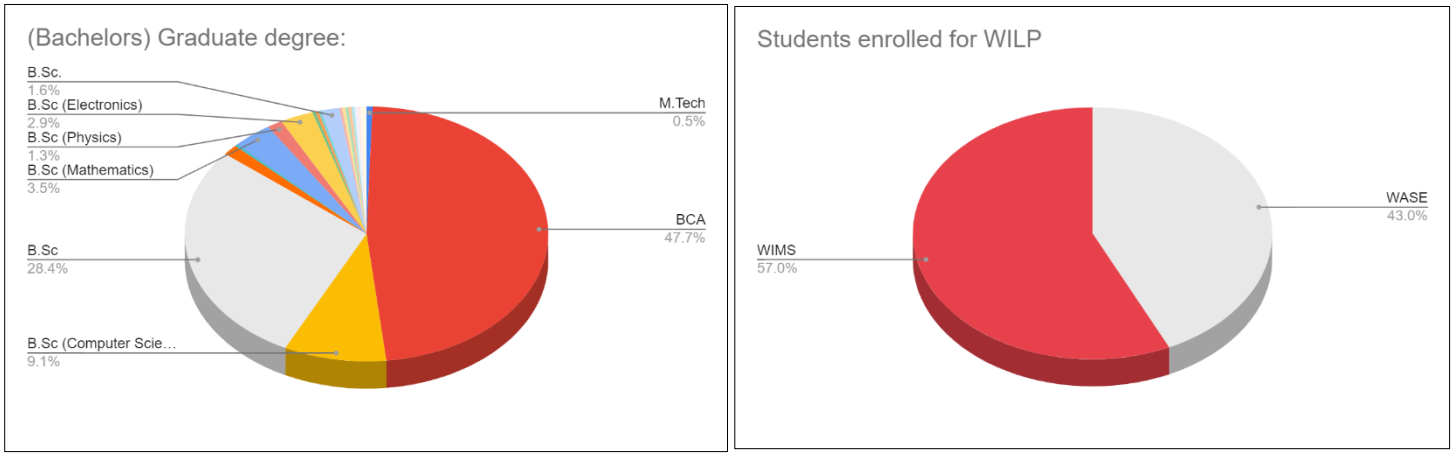


Figure 1 (a): Profile of incoming students; Figure 1 (b): Students opting for WILP

The enrollment statistics indicate that the majority of the students have shown a preference for WIMS, with 57% of the students enrolling in this program. On the other hand, 47% of the students have registered for the WASE as illustrated in Figure 1(b). The higher enrollment for WIMS can be attributed to the growing demand for professionals in the field of IT infrastructure management. The WIMS program offers students an opportunity to specialize in this domain and gain expertise in managing complex IT infrastructure. However, the WASE program is equally popular among students, as it offers a comprehensive curriculum that covers various software technologies and soft skills. Both programs have been designed to provide students with industry-relevant skills and knowledge, making them job-ready professionals.

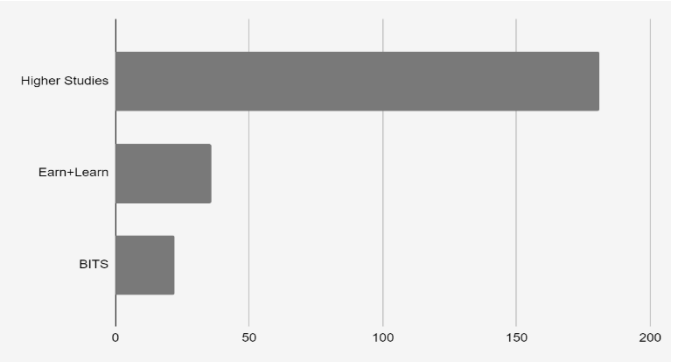
6.1 Program Design

Relevance

The primary purpose of these programs was to enhance the employability of graduates from colleges in tier 1 and tier 2 cities in India, particularly those from non-engineering backgrounds such as BSc and BCA. The training involves a combination of classroom instruction, hands-on projects, and on-the-job training.

Around 48.9% of students get to know about this program at the college festivals or annual functions. Whereas 37.3% of students get to know from word of mouth. They enroll in either of these programs for 1) higher studies and 2) earn while learning.

1) Motivation to join the program



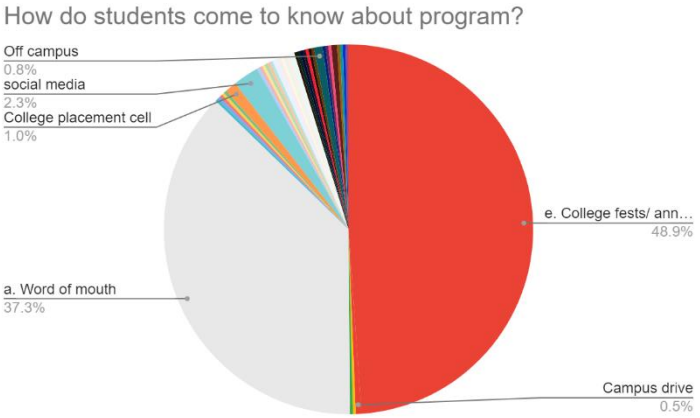


Figure 2(a): Motivation to join program; Figure 2(b): Program conversance

The major differentiator between the regular M.Tech program and WILP program is, M.Tech program is administered offline where students are selected through competitive exams. Whereas the WILP is an online program designed specially keeping in mind the requisites of the industry and market skills.

92.3% of alumni we interacted with, who now continue secure key positions in Wipro and other companies, have stated that they find these programs relevant. This further corroborates the relevance of 'Work Integrated Learning Program' which has been administered for more than two decades.

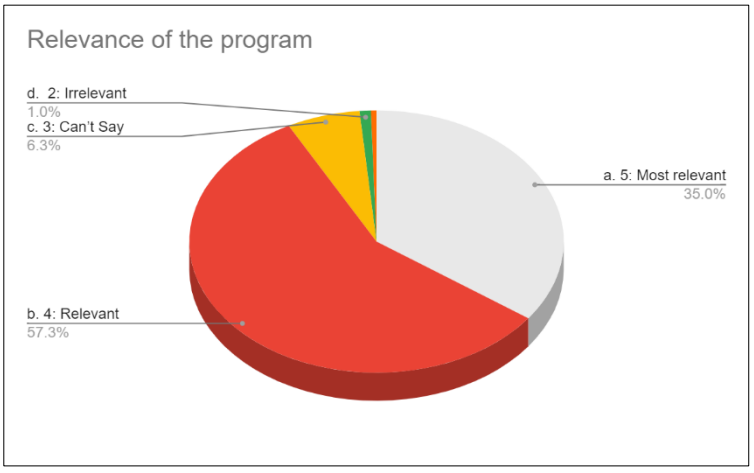


Figure 3: Relevance of WILP program by alumni

Preparedness

Wipro Academy has collaborated with Birla Institute of Technology, Pilani , an 'Institute of Eminence' to confer the students with M.Tech degree after the successful completion of the program. The duration of the program is four years where a student is assigned 'on the job' role and continues with the classes over the weekend. The association with BITS , Pilani offers a best of both worlds with BITS, Pilani has experience and expertise in delivering education programs while Wipro Academy, on the other hand has extensive experience in designing and delivering industry-relevant training programs to IT professionals. The academy possesses 'state-of-the-art' facilities in understanding the requisite concepts.

The program is designed for the classroom based learning. However, with the Covid-19 induced pandemic, the programs were initially switched to online mode to currently flip-classroom model. Flip classroom model comprises of the students attending sessions both, online and offline, per their schedule.

6.2 Program Delivery

Classroom Infrastructure & Classroom Experience

Students enrolled for the program do not have to pay tuition fees. All students unanimously accepted this fact. The programs are designed to provide students seamless classroom experience with state-of-the-art classroom infrastructure and by having sufficient mentors/instructors to conduct the courses. 97.3% of ongoing students find the program has sufficient instructors to complete the curriculum. On the other hand, the interaction with alumni corroborates the fact that Wipro Academy is equipped with the required infrastructure to run the program. 99% of alumni have unanimously stated this.

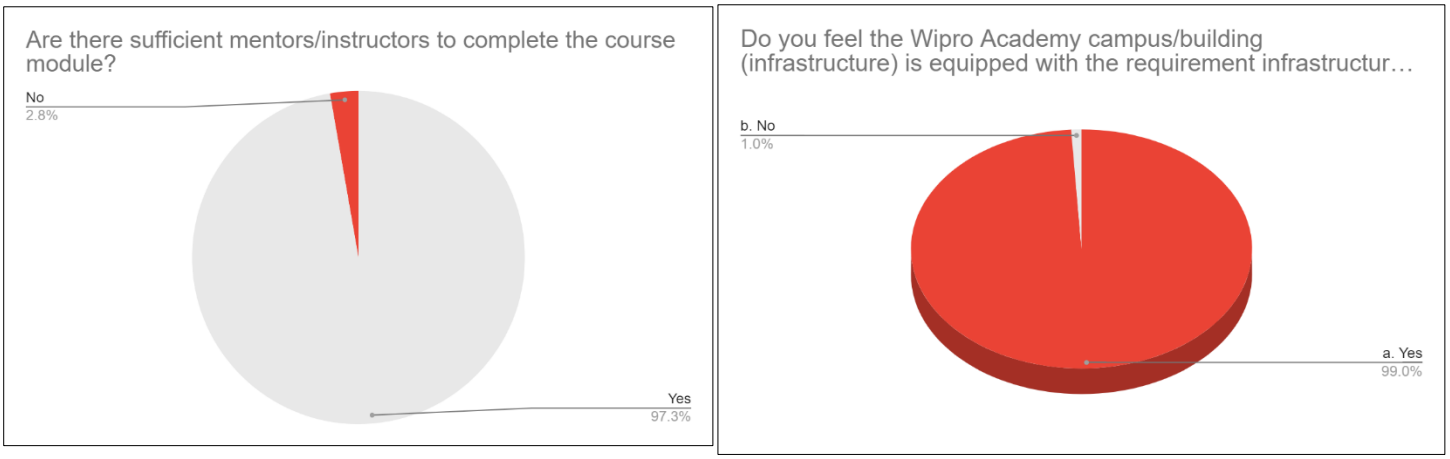


Figure 4(a): Current students on having sufficient mentors/instructors; Figure 4 (b): Alumni on Wipro Academy having sufficient infrastructure

The weekend classes are typically 6-8 hours long. The medium of instruction is English, and students are able to comprehend the subjects that are taught by the course instructors. Textbook or course materials are provided to aid the conceptual learning initiated during the class.

Flip classroom model has retained lab sessions. 75.3% of students are able to attend labs. 84.1% of the students find labs useful in understanding the classroom theories. 89.3% of students have stated their classroom experience from 'excellent' to 'very good'. 36.9% of students find it excellent whereas 52.4% find it very good. This indicates that students find classroom experience more fulfilling than an online mode of learning.

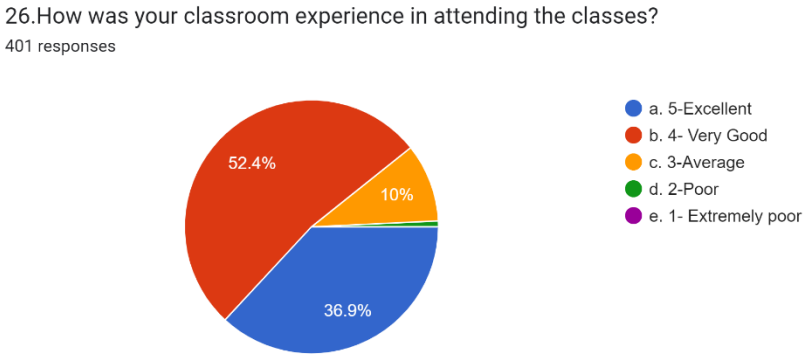


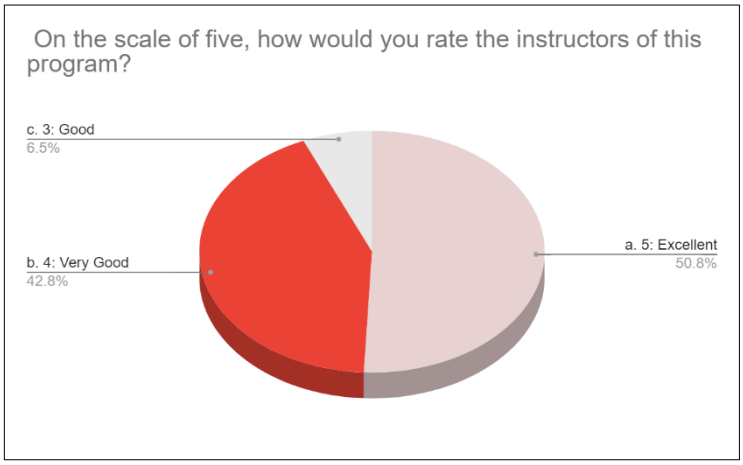
Figure 5: Student's classroom experience

Faculties & Instructors

The faculties for the program are a mix of faculties from BITS Pilani as well as Industry experts who are willing to teach. Notifications are shared from their database to the industry experts. The selection process starts with the general requisite of a candidate having a post-graduation degree with 2-3 years of experience. There is a dedicated team in the university who does the sorting and selection. This is followed by interaction with a selected panel. Once

selected, a schedule is prepared aligning their expertise with the courses to be taught including their availability of time.

Both ongoing students and alumni rated instructors from 'excellent' to 'very good'. This clearly indicates that without the quality instructors the quality of the program becomes questionable. Out of 93.5% of students, 50.7% of students have rated instructors as 'excellent'. Likewise, 34% of alumni have rated instructors as 'excellent' as illustrated in figure.6



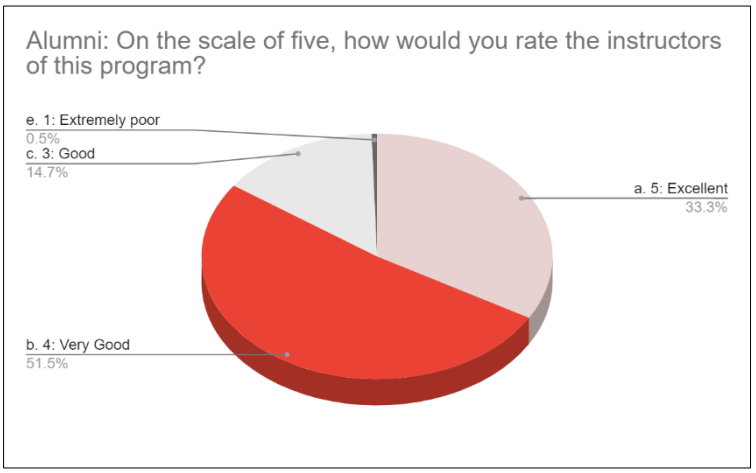


Figure 6(a): Student's rating for instructors; Figure 6 (b): Alumni's rating for instructors

6.3 Impact & Sustainability

USP of the program

The interaction with students, alumni, parents, Wipro location managers and BITs, Pilani faculties solicit that:

WILP not only benefits the students but also their families, who see their loved ones' success in the program. The program enables students to gain industry-relevant skills and knowledge, making them job-ready professionals. As a result, they can secure lucrative job opportunities and contribute to their family's financial well-being.

Another key salient feature of WILP program is its focus on B.Sc./BCA students. Without the program, these students may not get an opportunity to work in larger organizations or gain exposure to different domains. The program provides students with technical and domain knowledge and prepares them for a successful career in the IT industry. Many students who have completed the program have gone on to work in top organizations across the world.

The program is unique that it is the only program in the current ecosystem where B.Sc./BCA students can earn an M.Tech from an 'Institute of Eminence' - BITS Pilani. This is a significant advantage for students, as an M.Tech degree is highly valued in the industry and can open up several career opportunities.

Students

The assessment indicates that ongoing students believe the program aids getting a job. 98.5% of students stated that the program will help getting a job. 91.7% further mentioned that the program also helps to understand the course work while they are on the job. 90.7% of students believe that the M.Tech degree holds value in the market. It is interesting to note that 2nd semester students also share the same opinion compared to 4th and 6th semester students. Figure 7 illustrates some of these aspects.

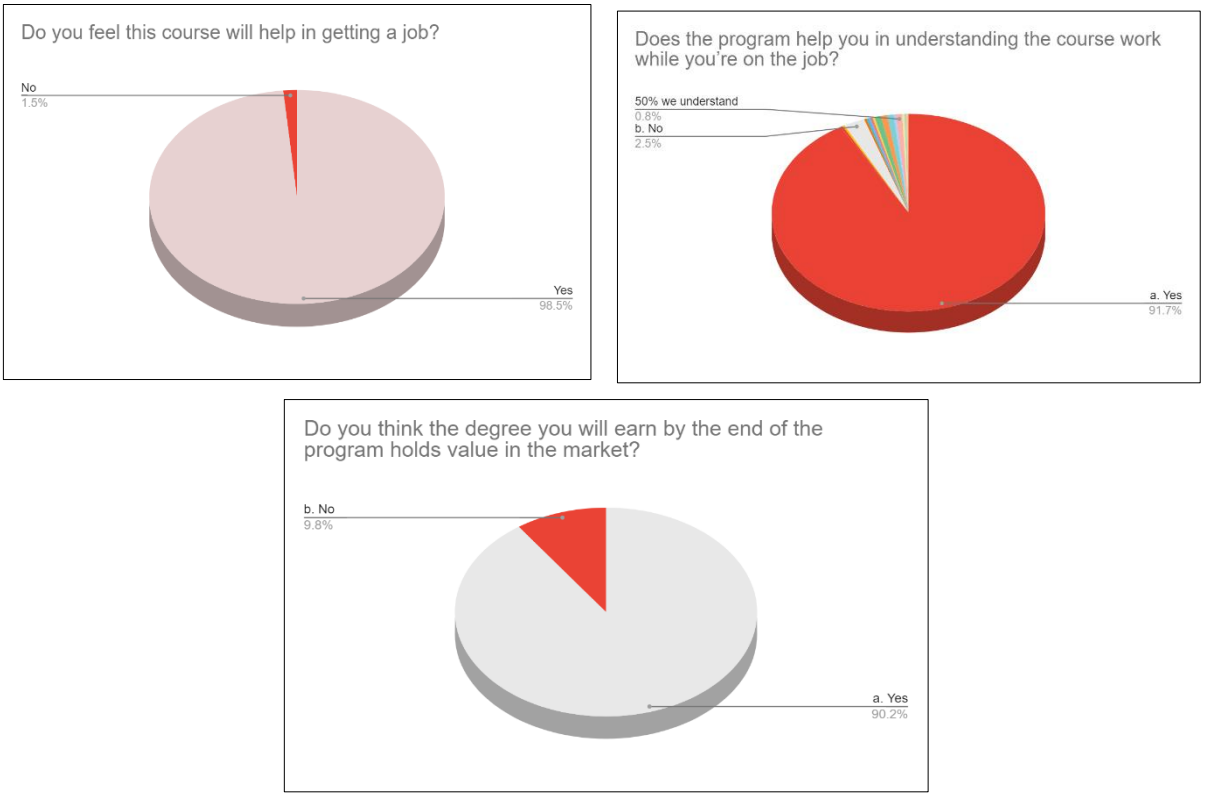
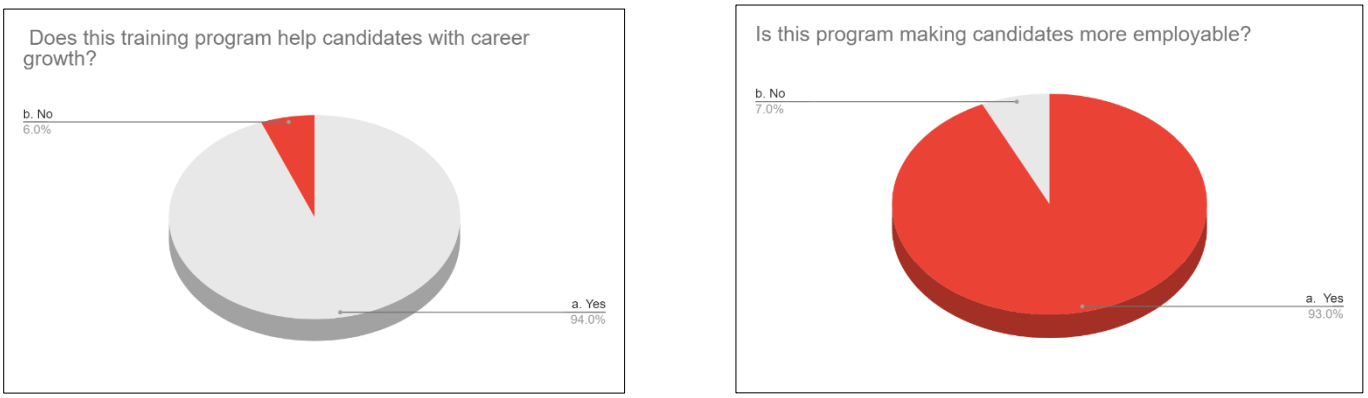


Figure 7: Student's perspective on opportunities after program

In addition, they also state to refer this program to their friends, relatives, colleagues, and peers. 94.7% of students expressed their desire to refer this program to friends, family, and peers.

Alumni

93.7% of alumni state that the program helps in the career growth and make them employable in the sector. The M.Tech degree holds value in the market.



According to them, the opportunity of earning while learning is the major success factor that can be attributed to this program. Most of the interaction with alumni happened for the ones who have continued working with Wipro for higher career prospects within the company. 91.2% of the alumni we interacted with have continued working in Wipro Ltd. The ones who have moved out have done for 1) better pay package, and 2) Work-life balance.

Parents

96.7% of parents of these students we interacted with believe the M.Tech degree holds value in the market and will refer this program to their friends, relatives, colleagues, and peers.

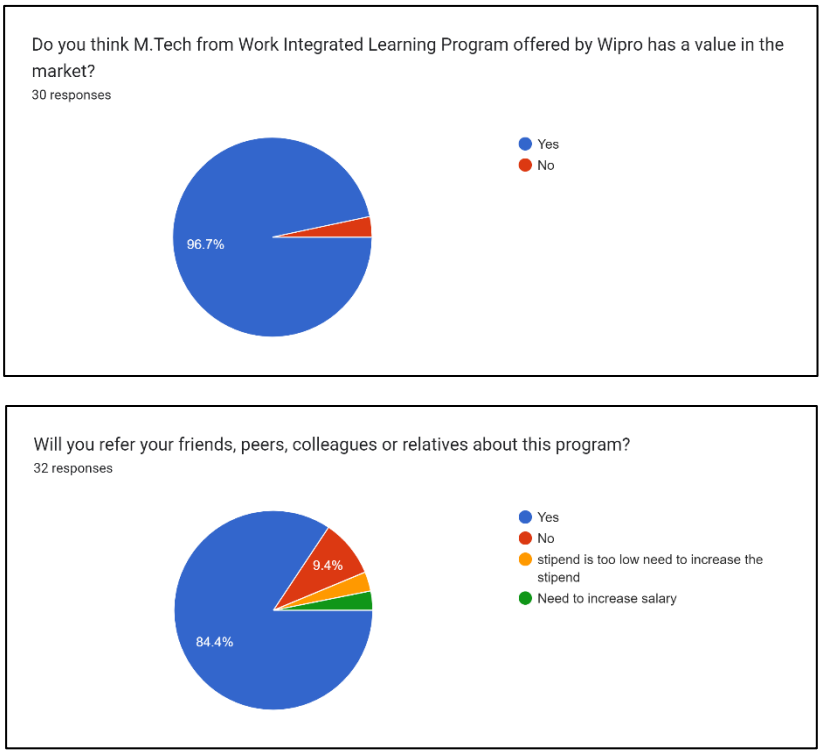


Figure 8: Parents' perspective on the program

7 SWOT Analysis

A SWOT analysis is carried out to understand the program's strengths, weaknesses, opportunities, and threats. It was conducted from the responses received from the program team and other implementation-level stakeholders, at the same time considering the beneficiary feedback.

Strengths	Weakness
• The program offers a unique learning experience that combines theoretical education with practical, on-the-job training. • WILP is designed to cater to the needs of BSc/BCA students, who may not have access to similar opportunities otherwise. • Students who complete the program are well-equipped to take on challenging roles in top organizations across the world.	• The rigorous nature of the program may not be suitable for all students, and some may struggle to balance the demands of work and education. • The program is only offered by Wipro Ltd and is not available to students who may be interested in pursuing similar opportunities with other organizations.
Opportunities	**Threats**
• Wipro can collaborate with other organizations to offer similar programs that cater to the needs of different industries. • The program can be adapted to include innovative technologies and domains, which can help to keep it relevant and up-to-date.	• The IT industry is constantly evolving, and the demand for new skills and knowledge may outpace the ability of the program to keep up. • Competition from other organizations offering similar programs may increase over time. • Changes in government regulations or policies could impact the viability of the program.

8 Conclusion and Recommendations

The Work Integrated Learning Program (WILP) by Wipro Ltd has been successful in its objective to cater to the demands of the IT/ITeS industry with a pool of youth honed to possessing the necessary skill set. However, to reach out to more students, Wipro Ltd should think of expanding the footprint of these centers from Tier-II or Tier-III cities to other cities and towns.

Additionally, the flip classroom model requires a change, as more students prefer attending classes in-person. While the on-the-job training provides valuable experience to students, WILP will need to focus on teaching students how to maintain a work-life balance. Dealing with work pressures and attending classes once a week can become exhausting for students. While the students are offered courses that are market valid, pertaining to the advancements that the industry experiences, these students will require to learn to remain market valid. Overall, WILP has the potential to continue being a successful program that provides students with valuable skills and experience to succeed in the IT industry.

Recommendations

Based on the observations and feedback from ongoing students, alumni, and parents we would like to make the following recommendations for the Work Integrated Learning Program:

- Switch to an in-person classroom model instead of the flip-classroom model, as more students prefer attending classes physically.
- Plan to introduce self-help courses or techniques once a fortnight or a month to help students deal with time management, work-life balance, and sound mental health related matters. This will help students to manage their workload and maintain their mental well-being.
- Focus on practical-based or hands-on project-based learning that allows students to work on a real-time problem/solution while attending classes physically. This will help students to understand the concepts better and prepare them for the industry.
- Make labs compulsory for the students, as practical-based learning is an essential aspect of the program.
- Though content revision happens once in three years, Wipro Academy with their in-house experts/instructors can introduce a course/skill that is most in demand. This will help the students to stay updated with the latest industry trends and technologies.
- Facilitate alumni-current students meet to create a networking platform for students to connect with alumni and learn about their experiences in the industry. This will help students to gain insights and prepare them for their future career.