# AN ASSESSMENT OF THE IMPLEMENTATION OF TECHNICAL VOCATIONAL EDUCATION AND TRAINING (TVET) PROGRAMS IN DUMAGUETE CITY: BASIS FOR A THREE-YEAR STRATEGIC DEVELOPMENT FRAMEWORK

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***ABSTRACT:*** *This study aimed to assess the Technical Vocational Institutions' (TVIs) implementation of the Technical Vocational Education and Training (TVET) program and their training delivery. It also creates an action plan that will address the recommendations of this study. This study assessed the TVET program implementation in terms of the TVI training delivery specifically to scholars catered to by the Technical Education and Skills Development Authority (TESDA). It specifically examined the training delivery of TVIs in sectors such as Agriculture, Forestry and Fishery, Automotive and Land Transportation, Construction, Electrical and Electronics, Human Health/ Health Care, Information and Communication Technology, Metals and Engineering, Processed Food and Beverages, Social, Community Development, and Other Services, Tourism (Hotel and Restaurant), TVET Sector. This study discovered that observance of program standards, training methods, best practices, perceived training effectiveness, and challenges faced by TVIs contribute to delivering TVET programs in Dumaguete City. Based on the findings, several recommendations have been made: increasing focus on sectors with fluctuating allocations, supporting growing sectors like tourism, and further developing scholarship programs in newly registered TVIs. The study also suggests refining the TWSP for consistent effectiveness, improving the STEP program through ongoing monitoring, enhancing flexible learning to optimize student engagement, and ensuring TVET programs meet industry demands for workforce development.*

***Keywords:*** *TVET Programs, implementation, training delivery, TVI, Dumaguete City*

## INTRODUCTION

*"We want an adaptable and adaptive Technical Vocational Education and Training (TVET) system that opens up opportunities for economic mobility for Filipinos, a TVET system that provides training that leads to employment," emphasized Secretary Jose Francisco Benitez.* The Technical Education and Skills Development Authority (TESDA) remains the most approved and trusted government agency for Q3 2024, reflecting public confidence in its mission. Historically, technical and vocational education offered alternatives for those unable to complete a bachelor's degree [1]**.** The National Manpower Youth Council (NMYC) initially addressed this need by providing training to out-of-school youth [2]**.** Educational reforms in 1994, led by the Congressional Commission on Education (EDCOM), resulted in Republic Acts 7722 and 7796 [3] [4], creating CHED and TESDA, respectively [5]**.** This tri-focal system assigned basic education to DepEd, technical-vocational training to TESDA, and higher education to CHED [5]**.** Despite TESDA's mandate, managing partner Technical Vocational Institutions (TVIs) remains challenging. TESDA's TVET programs aim to ensure efficient, accessible, and high-quality training aligned with Republic Act No. 7796 (1994) [4]**.** Scholarships and partnerships with private TVIs help expand reach, but gaps remain in standard compliance and delivery quality. Regular monitoring and evaluation are vital to ensure effective training aligned with TESDA standards.

As a TESDA employee, the researcher aims to assess TVET program implementation in Dumaguete City, focusing on scholars and addressing the lack of localized studies on TVI training delivery.

## THEORETICAL BACKGROUND

This study is grounded in three major theories relevant to the implementation and delivery of TVET programs in Dumaguete City. **ADDIE Model** of Instructional Design. Gagné's ADDIE model underpins the structure of training delivery in TVIs. In the Analysis phase, local workforce and learner needs are assessed to align with industry demands [7] . The Design and Development phases ensure that learning objectives and materials integrate both theory and practice. During Implementation, training is delivered through workshops and real-world experiences like internships. The Evaluation phase gathers feedback from stakeholders to enhance the program's relevance and effectiveness in addressing evolving industry needs.

**Competency-Based Theory.** Rooted in the work of McClelland [8]. and Bloom [9], these theory emphasizes mastery of specific skills over rote knowledge. In the context of TVET, it ensures that learners are trained and assessed based on real-world competencies aligned with employer expectations in Dumaguete City. The focus is on measurable skills and performance outcomes that directly improve employability. **Systems Theory.** According to Bertalanffy, organizations like TVIs operate as interconnected systems. Inputs (e.g., policies, trainers, resources) influence processes (e.g., training delivery) that lead to outputs (e.g., student competencies and trainer feedback) [10]. This theory supports analyzing how internal and external elements interact to affect program effectiveness. In Dumaguete City, where workforce demands shift rapidly, Systems Theory encourages a responsive, integrated approach to managing TVET delivery.

**Theoretical Framework**

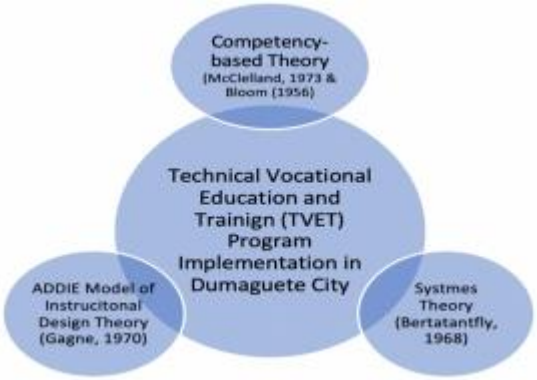


**Figure 1: Theoretical Framework of the Study**

The implementation of the TVET program in Dumaguete City is guided by three foundational theories: the ADDIE Model of Instructional Design, Competency-Based Theory, and Systems Theory. Gagné's ADDIE model structures the program through its phases—Analysis, Design, Development, Implementation, and Evaluation—ensuring systematic planning and delivery [7]. The diagram's downward arrow reflects ADDIE's direct influence on instructional design. McClelland [8]. and Bloom's [9]. Competency-Based Theory emphasizes measurable skills and mastery, aligning learning outcomes with workforce needs. Bidirectional arrows illustrate its integrative role between instructional and systemic elements. Bertalanffy's Systems Theory frames TVET as a dynamic system, with inputs, processes, and outputs working cohesively. Its downward arrow signifies the holistic influence on program coherence. The horizontal arrows in the diagram show the mutual integration of all three theories, collectively shaping an effective, responsive TVET strategy [10].

## REVIEW OF RELATED LITERATURE

Vocational Education and Training (VET) plays a critical role in nation-building, particularly in developing economies. However, aligning VET with labor market needs remains a challenge for many low- and middle-income countries due to barriers faced by learners, trainers, and institutions [11]. Successful models in countries like Germany, Switzerland, and Australia demonstrate the value of industry-driven courses, strong business partnerships, and hands-on training [12]. In the Philippine context, TVET programs delivered by TESDA emphasize Competency-Based Education (CBE), where learners demonstrate real-world skills rather than rely solely on theoretical knowledge (OECD, 2020). CBE is particularly suitable for Dumaguete City, where demand for skilled labor in sectors like hospitality, healthcare, and IT is high [13]. Constructivist learning approaches further enhance training by promoting active problem-solving and application [14]. Collaboration with industry is essential for ensuring training relevance and increasing student employability (ILO, 2023). Blended learning also improves accessibility and flexibility, especially in resource-limited settings [15]. Yet challenges persist, including outdated equipment, a lack of skilled trainers, and curriculum gaps. Investments in infrastructure, updated materials, and digital literacy are needed [16], along with continuous evaluation to maintain program relevance [17]. Local studies underscore these points. Tracking graduate employment outcomes helps align training with industry needs and improve employability [18]. Programs like STEP have shown success in reducing poverty and promoting inclusion [19, 20]. Additionally, integrating entrepreneurship in training fosters micro-business growth among graduates [21, 22]. Accessibility is another key factor. Strategic placement of training centers and the use of digital platforms enhance reach [23, 24]. Industry-certified trainers and standards-aligned programs like TWSP ensure training quality [25, 26]. Financial support through UAQTEA and PESFA also increases access and completion for marginalized students [27, 28]. Continuous feedback and stakeholder involvement remain vital for improving TVET delivery in dynamic contexts like Dumaguete [29]. Overall, effective TVET implementation must integrate employability, entrepreneurship, accessibility, quality assurance, and ongoing evaluation.

## CONCEPTUAL FRAMEWORK OF THE STUDY

TVET program implementation in Dumaguete City is influenced by three core elements: scholarship program standards, training delivery methods, and institutional best practices. Scholarship programs like TWSP, STEP, PESFA, and UAQTEA establish quality benchmarks for TVIs, aligning training with national employment goals and ensuring proper use of funds. However, compliance can be difficult for resource-limited institutions. Training delivery methods—particularly flexible learning and face-to-face instruction—also impact outcomes. Flexible learning enhances access and adaptability, especially during crises, while face-to-face training enables hands-on skill development. Effectiveness depends on how well these methods match trainee needs and program goals. Institutional best practices offer proven strategies for addressing resource constraints, optimizing scholarship use, and meeting industry demands. These practices provide a foundation for improving training quality and outcomes. Overall, these interconnected components guide effective and responsive TVET implementation, emphasizing the need for continuous evaluation and improvement.

***Conceptual Framework***

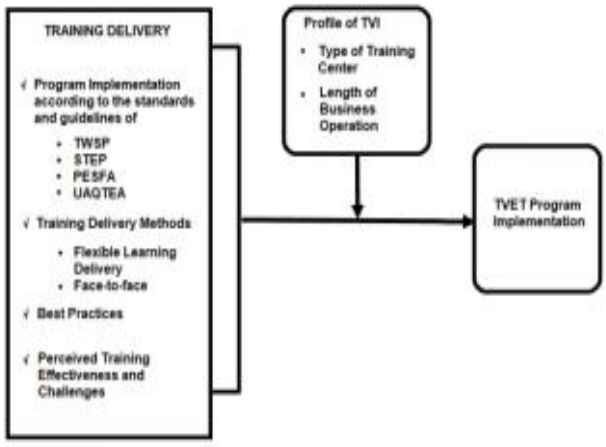


**Figure 2. The Conceptual Framework of the Study**

**Statement of the Problem**

The main problem of this research is assessing the training delivery of the TVET Program implementation in Dumaguete City. Specifically, it answers the following questions:

1. What are the scholarship allocations of TVET institutions for the calendar year 2020-2024 in terms of the following sectors: Agriculture, forestry and fishery, Automotive and land transportation; Construction, Electrical and electronics, Human health/ health care, Information and communication technology, Metals and engineering, Processed food and beverages, Social, community development, and other services, Tourism (hotel and restaurant), and TVET sector?
2. What is the profile of the TVI in terms of the type of training center and the length of business operation?
3. To what extent is the scholarship program implementation being followed in accordance with the standards of Training for Work Scholarship Program (TWSP), Special Training for Employment Program (STEP), Private Education Student Financial Assistance (PESFA); and Universal Access to Quality Tertiary Education Act (UAQTEA)?
4. What are the best practices observed by TVIs in the implementation of TVET programs?
5. What is the perceived training effectiveness of the program implementation in terms of flexible learning delivery and full face-to-face delivery?
6. What are the challenges the TVIs encounter in implementing the TVET Program in Dumaguete City?

**Significance of the Study**

This study provides valuable insights for stakeholders involved in TVET implementation in Dumaguete City:

- **TESDA and Policymakers** will benefit from data on the effectiveness of TVET program delivery, helping inform policy revisions and resource allocation to improve quality and accessibility.
- **Technical Vocational Institutions (TVIs)** can use the findings to evaluate and enhance their training delivery, better align with industry needs, and improve outcomes for scholars and communities.
- **Trainees** gain recognition of the personal and professional value of technical education. The study highlights how TVET supports skills development, employability, and empowerment.
- **Community and Local Industries** benefit from a more skilled workforce. Improved TVET delivery fosters economic growth and strengthens ties between education and labor market demands.

Overall, the study contributes to refining TESDA's training delivery system, supporting continuous improvement and relevance.

**Scope and Limitations of the Study**

The study will focus on the TVET Program implementation, specifically on the training delivery of TVIs to scholars/trainees in Dumaguete City. It will assess the TVI training delivery of the TVET Program offered to scholars in different sectors. The study will not cover other programs not involved in the training implementation. It will primarily rely on data from scholarship slots implemented in CY 2020-2024 and TVIs delivering the TVET program. Geographic and time constraints may also limit the study's breadth.

## RESEARCH METHODOLOGY

**Research Design**

The descriptive research design was used in this study. Thus, it is hypothesis-free. The descriptive method is a fact-finding study with sufficient and accurate interpretation of the findings. The data collection method used a questionnaire as the main instrument. Primary data was obtained from the questionnaires distributed among the Technical Vocational Institutions (TVIs) in Dumaguete City. A sampling was applied to cover trainers who are conducting the training in different sectors such as Agriculture, Forestry and Fishery, Automotive and Land Transportation, Construction, Electrical, and Electronics, Human Health/ Health Care Information and Communication Technology Metals and Engineering, Processed Food and Beverages, Social, Community Development, and Other Services, Tourism (Hotel and Restaurant), TVET Sector. Secondary was taken from the generated data from TESDA VII – Negros Orientals' CY 2020-2024 scholarship reports and other reference materials to form part of this study.

**Research Environment**

The study was conducted in Dumaguete City, the Capital of Negros Oriental; despite its smallness, numerous private TVIs were able to register with TESDA. Dumaguete City itself is the City of Gentle People and a University town. Industries and infrastructures are well-developed in the city; these include seaports, shipping, telecommunications, business process outsourcing, tourism, and airports. For this study, TVIs in Dumaguete City were the primary respondents.

**Research Respondents**

To determine how TVIs implement the TESDA Programs in Dumaguete City, this study focused on TVIs present/situated in the city. Particularly TVIowners/heads/administrators/staff and trainers of those TVIs with registered qualifications in different sectors, namely Agriculture, Forestry and Fishery, Automotive and Land Transportation, Construction, Electrical and Electronics, Human Health/ Health Care, Information and Communication Technology, Metals and Engineering, Processed Food and Beverages, Social, Community Development, and Other Services, Tourism (Hotel and Restaurant), TVET Sector, will take part in this study.

**Research Instrument**

The study utilized both primary and secondary data. Primary data was gathered through self-made survey questionnaires distributed to TVI owners, heads, administrators, staff, and trainers in Dumaguete City. The questionnaire underwent expert consultation and was pilot-tested on February 12, 2025, with TVIs outside Dumaguete to assess reliability. Using Cronbach's Alpha, the pilot test yielded a score of **0.956** for 84 items, indicating excellent internal consistency (see Annex A). This confirmed the instrument's reliability for full deployment. The survey had six parts. The first collected respondent profiles, including TVI type and length of operation. The remaining sections gathered data on scholarship allocations, institutional profiles, and adherence to program standards, best practices, training effectiveness, and implementation challenges. It aimed to assess TVI compliance with TESDA scholarship programs such as

**TWSP**, **STEP**, **PESFA**, and **UAQTEA**.

**Construction/Origin**

This study evolved from identified research gaps, which lack studies on TESDA Program effectiveness and raised concerns about TVIs' adherence to the TESDA standard on training delivery, contributing to its training output.

**Reliability/validity**

The study was based on the secondary data of programs implemented by TVI records with TESDA. The study was considered reliable in addressing the gaps of this study and resulted in recommendations that addressed TVIs' effective training delivery to scholars.

**Ethical Standards**

Ethical standards were properly observed while conducting this study. The respondents and the data gathered were with informed consent; data were treated with confidentiality, and the gathering of data was voluntary and guaranteed with Data Protection.

**Research Data Gathering Procedure**

A mixed method was applied to conduct this study. The primary data of this study were gathered through questionnaires distributed to all TVIs operating in Dumaguete City. A sampling was used to cover trainers conducting the training with the different TVIs handling different sectors, namely Agriculture, Forestry and Fishery, Automotive and Land Transportation, Construction, Electrical and Electronics, Human Health/ Health Care Information and Communication Technology, Metals and Engineering, Processed Food and Beverages, Social, Community Development, and Other Services, Tourism (Hotel and Restaurant), TVET Sector. Secondary data were taken from the generated data from scholarship reports, books, and other reference materials to form part of this study.

**Statistical Treatment of Data**

As discussed earlier, the quantitative data was sourced from primary and secondary data. This analysis focuses on the examination of numerical/quantitative data. Before the analysis, the responses were coded and prepared for examination. The collected data were analyzed, and the questionnaire responses were coded by assigning numeric characters to the data. Each table in the following pages of the presentation, interpretation, and data analysis includes a different Likert scale with specified intervals, verbal descriptions, and interpretations. The statistical tools used were the percentage, weighted mean, and standard deviation. This study also involved qualitative data analysis, which was used for triangulation of the qualitative data analysis that served as verification. These analysis results were integrated with the quantitative discussion in the data analysis parts.

## DEFINITION OF TERMS

**Technical Vocational Education and Training (TVET):** Education combining general studies with technology and practical skills for various occupations [30].

**Technical Vocational Institution (TVI):** Public or private institutions offering TVET programs, including TESDA Technology Institutions, HEIs, and training centers [31].

**Training for Work Scholarship Program (TWSP):** Supports economic growth by providing courses in priority industries to reduce poverty through TVET[32].

**Special Training for Employment Program (STEP):** Community-based training aimed at skills development for employment and entrepreneurship, focusing on the informal sector [33].

**Private Education Student Financial Assistance (PESFA):** Grants for deserving students in private post-secondary non-degree TVET courses aligned with national priorities. [34].

**Scholars:** Beneficiaries of the TESDA Scholarship Program. [35].

**Universal Access to Quality Tertiary Education Act (UAQTEA):** Republic Act [36].providing free tuition and financial assistance in state universities, colleges, and state-run TVIs [37].

## RESULTS AND DISCUSSIONS

**Question No. 1 What are the scholarship allocations of TVET institutions for the calendar year 2020-2024 in terms of the following sectors: Agriculture, forestry and fishery, Automotive and land transportation; Construction, Electrical and electronics, Human health/ health care, Information and communication technology, Metals and engineering, Processed food and beverages, Social, community development, and other services, Tourism (hotel and restaurant), and TVET sector?**

| TVI | CY 2024 | CY 2023 | CY 2022 | CY 2021 | CY 2020 | Total 20-24 | Remarks |
|---|---|---|---|---|---|---|---|
| **A** | 219 | 495 | 120 | 131 | 185 | **1,150** | Implemented |
| **B** | 0 | 0 | 0 | 0 | 0 | **0** | Newly Registered |
| **C** | 345 | 199 | 135 | 168 | 0 | **847** | Implemented |
| **D** | 40 | 20 | 18 | 20 | 0 | **98** | Implemented |
| **E** | 50 | 50 | 0 | 65 | 17 | **182** | Implemented |
| **F** | 135 | 208 | 241 | 168 | 125 | **877** | Implemented |
| **G** | 75 | 43 | 77 | 79 | 20 | **294** | Implemented |
| **H** | 40 | 40 | 40 | 191 | 151 | **462** | Implemented |
| **I** | 305 | 931 | 184 | 721 | 651 | **2,792** | Implemented |
| **J** | 45 | 48 | 0 | 115 | 80 | **288** | Implemented |
| **K** | 475 | 475 | 567 | 500 | 150 | **2,167** | Implemented |
| **L** | 40 | 20 | 25 | 80 | 100 | **265** | Implemented |
| **M** | 62 | 240 | 40 | 251 | 124 | **717** | Implemented |
| **N** | 40 | 20 | 20 | 30 | 41 | **151** | Implemented |
| **O** | 20 | 20 | 0 | 20 | 15 | **75** | Implemented |
| **P** | 0 | 0 | 0 | 0 | 15 | **15** | Implemented |
| **Q** | 187 | 86 | 114 | 366 | 45 | **798** | Implemented |
| **R** | 779 | 545 | 972 | 1,616 | 686 | **4,598** | Implemented |
| **S** | 95 | 48 | 21 | 32 | 0 | **196** | Implemented |
| **T** | 74 | 43 | 20 | 60 | 0 | **197** | Implemented |
| **U** | 121 | 996 | 255 | 513 | 442 | **2,327** | Implemented |
| **V** | 0 | 0 | 0 | 0 | 0 | **0** | Newly Registered |

**Top 5 TVIs by Total Scholarships (2020–2024):**

1. **R** – 4,598
2. **I** – 2,792
3. **U** – 2,327
4. **K** – 2,167
5. **A** – 1,150

This study analyzed scholarship allocations across various sectors in Technical Vocational Institutions (TVIs) from 2020 to 2024. TVI R consistently had the highest total

scholarships, peaking at 4,598 in 2024, reflecting broad sector engagement including Automotive, Agriculture, and Construction. Tourism (Hotel and Restaurant) was a major focus, with TVI M allocating 996 scholarships in 2024, while Human Health/Health Care showed significant allocation, notably TVI C with 345 scholarships in 2024. Certain sectors, like Electrical and Electronics and Information and Communication Technology (ICT), experienced fluctuating or declining allocations. For example, TVI A dropped to zero scholarships in Electrical and Electronics in 2024, and ICT allocations varied widely across institutions. Newly registered TVIs, such as TVI B and TVI V, reported no scholarships, indicating early program development stages. Automotive and Land Transportation saw steady support at some TVIs but declined in others. Social and Community Development showed periodic allocations, while the general TVET sector had minimal support in many institutions. The findings suggest a strategic shift with emphasis on sectors showing labor market demand, particularly Tourism, Human Health, and Automotive. However, inconsistent support in Electrical and Electronics and ICT highlights the need for balanced allocations to avoid underdeveloped fields. Newly registered TVIs require further development to expand scholarship offerings. Recommendations include increasing focus on fluctuating sectors (Electrical, ICT), sustaining growth sectors (Tourism), and supporting new TVIs to promote inclusivity. The application of the ADDIE instructional design model underscores the need for ongoing assessment, curriculum alignment, effective implementation, and continuous evaluation to adapt scholarship programs to evolving market demands.

**Question No. 2. What is the profile of the TVI in terms of the type of training center and the length of business operation?**

| Category | Classification | Frequency | Percentage (%) |
|---|---|---|---|
| **Type of Training Center** | Private | 86 | 83.50 |
| | Public | 17 | 16.50 |
| **Years of Business Operations** | 21 years and above | 8 | 7.77 |
| | 16 – 20 years | 7 | 6.80 |
| | 11 – 15 years | 26 | 25.24 |
| | 6 – 10 years | 26 | 25.24 |
| | 1 – 5 years | 36 | 34.95 |
| **Total Respondents** | | **103** | **100.00** |

The data on the type of training centers, their frequency, and percentage distribution among a sample of 103 participants. The training centers are categorized into private and public types. The results indicate that the majority of participants (83.50%) are from private training centers, while a smaller proportion (16.50%) are from public training centers. Findings reveal that out of 103 participants, 86 participants (83.05%) are coming from private training centers. This indicates that the majority of respondents were from private training institutions, that this indicates more private TVIs were capable in applying for registration and offering the trainings while there were only 17 participants (16.50%) were from public training centers, suggesting that there are lower numbers of public training centers and that more private training centers are present in Dumaguete City. TVIs may it be private or public, both share the same standards to be followed upon application and the same standards to follow in implementing the TVET programs. On the information about how long TVIs have been operating. The data is grouped according to the number of years the centers have been in business, along with the number of centers in each group and their percentage. The results reveal that only 8 centers (7.77%) have been running for 21 years or more, which means that only a small number TVI operated with longer years. A slightly smaller group—7 centers (6.80%)—has been operating for 16 to 20 years. Meanwhile, 26 centers (25.24%) have been active for 11 to 15 years, and another 26 (25.24%) have been open for 6 to 10 years. The largest group includes 36 centers (34.95%) that have only been in operation for 1 to 5 years. This shows that many TESDA training centers are still new. In fact, most of the centers have been operating for 15 years or less. This suggests that the field of TESDA training centers is still developing and growing. The rise of newer centers may be a response to the changing needs of the job market and recent efforts to improve education and training opportunities. The TVIs length of operation also determines its number of registered qualifications to specific sectors.

**Question No. 3: To what extent is the scholarship program implementation being followed in accordance with the standards of Training for Work Scholarship Program (TWSP), Special Training for Employment Program (STEP), Private Education Student Financial Assistance (PESFA); and Universal Access to Quality Tertiary Education Act (UAQTEA)?**

| Scholarship Program | CM (Wx) | SD | Verbal Description | Overall Interpretation |
|---|---|---|---|---|
| **Training for Work Scholarship Program (TWSP)** | 3.62 | 0.57 | Highly Implemented | The TWSP is thoroughly implemented with strong outcomes in accessibility, industry alignment, employment tracking, and outreach efforts. It effectively meets labor market needs and demonstrates strong institutional capacity. |
| **Special Training for Employment Program (STEP)** | 3.63 | 0.54 | Highly Implemented | The STEP program is highly effective in empowering marginalized sectors, promoting entrepreneurship, and improving socio-economic conditions. It aligns well with community and industry needs while reducing poverty and fostering livelihood growth. |
| **Private Education Student Financial Assistance (PESFA)** | 3.61 | 0.50 | Highly Implemented | PESFA effectively provides financial aid and equal opportunities for disadvantaged students, supports employability and entrepreneurship, and ensures training in high- |

| | | | | |
|---|---|---|---|---|
| | | | | demand sectors with strong quality assurance mechanisms. |
| **Universal Access to Quality Tertiary Education (UAQTEA)** | 3.65 | 0.48 | Highly Implemented | UAQTEA successfully ensures free, quality tertiary education, particularly for disadvantaged groups. It equips students with advanced and industry-relevant skills, contributing significantly to employability and national economic growth. |

**A**ll components of the TWSP are rated as "Highly Implemented," with mean scores from 3.54 to 3.72 and a composite mean of 3.62 (SD = 0.57), indicating thorough and effective implementation. Key strengths include accessibility, labor market alignment, employment tracking, training quality, and outreach efforts. The highest score (3.72) was for tracking graduates who secured employment, reflecting the program's success in ensuring workforce readiness. Consistent use of industry-recognized trainers (mean = 3.64) and provision of necessary tools (mean = 3.60) further validate its quality. Outreach efforts (mean = 3.63) demonstrate effective engagement of potential trainees. Strategic location enhances accessibility, a critical factor in program effectiveness [23].The program consistently meets absorptive capacity and scholarship targets, indicating strong resource management [22]. Emphasis on labor market demands ensures training relevance and employability [25].Graduate employment tracking signals commitment to long-term outcomes [18]. Trainer qualifications maintain high standards aligned with industry needs [26]. Continuous evaluation through trainee feedback supports ongoing improvement [29]. Outreach strategies, including social media and community events, widen program reach and participation [24]. Overall, the TWSP effectively delivers accessible, market-aligned training, maintains quality instruction, tracks employment success, and engages its target audience, contributing positively to workforce development and economic growth. The six components of STEP are rated as "Highly Implemented," with mean scores between 3.58 and 3.72 and a composite mean of 3.63, indicating consistent and effective implementation. Low standard deviations (0.48–0.59) suggest agreement among participants on the program's impact. STEP effectively empowers marginalized sectors by providing relevant skills aligned with local industry needs, enhancing employment and entrepreneurship opportunities [38][39]. Graduates have successfully pursued wage employment or started micro-businesses, contributing to improved socio-economic conditions [27] [40]. The program supports poverty reduction (mean = 3.59) by fostering sustainable livelihoods and long-term economic growth [41]. It also facilitates the growth and sustainability of graduates' careers and businesses (mean = 3.58) [42]. In summary, STEP is highly effective in promoting social equity, improving livelihoods, and supporting local economic development, with strong alignment to community and industry needs. Its consistent positive impact demonstrates its role in achieving long-term socio-economic mobility. While all seven components of the PESFA program are rated "Highly Implemented," with mean scores ranging from 3.55 to 3.68 and a composite mean of 3.61, indicating consistent and effective performance. Low standard deviations (0.47–0.52) reflect reliable perceptions among participants. PESFA effectively provides financial aid to disadvantaged students, enhancing access to vocational training and promoting equal opportunities [43][44]. The program significantly improves employability for unemployed individuals through skills training (mean = 3.57) (Hernandez & Castillo, 2020) and supports entrepreneurship development (mean = 3.55) [45]. Training is aligned with labor market needs, focusing on high-demand sectors such as healthcare, construction, hospitality, and electronics (mean = 3.58) [29]. Quality standards are upheld with adequate infrastructure and resources (mean = 3.66) [46]. The highest rating (mean = 3.68) reflects increased access to quality vocational education for disadvantaged groups [25]. In summary, PESFA is highly effective in providing financial assistance, fostering equal opportunity, enhancing employability, and delivering quality training aligned with labor market demands. The program plays a vital role in social mobility and economic development for marginalized populations.

And all program components are rated "Highly Implemented," with mean scores between 3.56 and 3.74 and a composite mean of 3.65. Low standard deviations (0.45–0.50) indicate consistent positive perceptions of the program's effectiveness. The UAQTEA program excels in equipping students with advanced, market-relevant skills, particularly in healthcare, construction, automotive, and IT sectors [29]. It effectively removes financial barriers, enabling low-income students to pursue tertiary education without tuition concerns (Perez & Ortiz, 2022). The program's strong alignment with employer needs is reflected in high graduate employment rates (mean = 3.74) [25]. Admission criteria are fairly and consistently applied (mean = 3.71) [46], while training balances theoretical knowledge and practical experience (mean = 3.68) [28]. Additionally, UAQTEA contributes positively to economic development by supplying industries with skilled, job-ready workers (mean = 3.65) [47]. Despite these strengths, recommendations to enhance the program include: (a) Strengthening partnerships with industry to keep curricula current and expand opportunities for internships and direct hiring, (b) Expanding student support services such as career counseling, job placement assistance, and professional networking events, (c) Improving access for students in remote or rural areas through mobile training units, community collaborations, and online courses, (d) Implementing systematic alumni tracking to monitor career progression and inform continuous program improvement, and (e) Providing post-graduation support, including mentoring and continuing education, to foster ongoing professional growth. Overall, UAQTEA is highly effective in meeting its goals of promoting equitable access to quality tertiary education and preparing a skilled workforce. With targeted enhancements, it can further strengthen its impact on students and the nation's economic future.

**Question No. 4: What are the best practices observed by TVIs in the implementation of TVET programs?**

| Category | Key Best Practices | CM (X) | Verbal Description |
|---|---|---|---|
| **Industry Alignment and** | Regular consultations, partnerships with | 3.61 | Strongly Agree |

| | | | |
|---|---|---|---|
| **Partnerships** | private sector, employer involvement, and community engagement | | |
| **Curriculum Development and Relevance** | Continuous curriculum updates and feedback collection from industry | 3.62 | Strongly Agree |
| **Competency-Based and Modular Training** | Adoption of competency-based and modular approaches | 3.70 | Strongly Agree |
| **Work-Based Learning and Application** | Provision of internships and extensive hands-on experiences | 3.62 | Strongly Agree |
| **Monitoring, Evaluation, and Accreditation** | Institutional monitoring, instructor accreditation, and employment tracking | 3.71 | Strongly Agree |
| **Certification and Recognition** | Issuance of nationally recognized certifications | 3.73 | Strongly Agree |
| **Government and Institutional Collaboration** | Close coordination with government agencies | 3.69 | Strongly Agree |
| **Accessibility and Inclusion** | Access for marginalized groups and flexible training modes (online, blended, evening classes) | 3.70 | Strongly Agree |
| **Overall Composite Mean** | | **3.66** | **Strongly Agree** |

Technical Vocational Institutions (TVIs) demonstrate strong adherence to best practices in TVET delivery, as evidenced by a high composite mean score of 3.66, categorized as "Strongly Agree." A key strength of these institutions is their robust collaboration with industry partners, with employers actively involved in curriculum development and regular consultations to ensure the training programs remain relevant to labor market needs. TVIs widely adopt competency-based and modular curricula, which align closely with industry requirements and enhance the employability of graduates. Work-based learning opportunities such as internships and apprenticeships are prioritized to provide students with valuable real-world experience. Quality assurance is also a major focus, with institutions emphasizing accreditation, monitoring systems, and employment tracking to maintain high standards and measure graduate success. Additionally, TVIs demonstrate a strong commitment to inclusivity and accessibility, offering flexible learning formats that cater to marginalized groups and working individuals, thus broadening participation in vocational education.

The consistent high ratings across various components reflect a well-rounded, industry-aligned, and inclusive approach supported by active engagement from stakeholders including employers, local communities, and government agencies. To further strengthen the TVET system, it is recommended that institutions formalize long-term partnerships with industry and involve employers more closely in co-developing curricula. Regular updates to training programs are essential to keep pace with evolving industry trends and technological advancements. Expanding inclusion efforts through greater investment in flexible learning options such as online courses, modular programs, and evening classes is particularly important for reaching underserved and remote populations. Enhancing data collection and graduate tracking systems will improve the assessment of employment outcomes and support continuous program improvement. Furthermore, promoting national and international accreditation can help ensure quality and increase the competitiveness of TVET graduates. Finally, maintaining close collaboration with government bodies will align training programs with national development goals and secure the necessary support for innovation and scaling efforts.

**Question No. 5. What is the perceived training effectiveness of the program implementation in terms of flexible learning delivery and full face-to-face delivery?**

| Learning Delivery Mode | CM (Wx) | SD | Verbal Description | Interpre-tation | Summary of Key Findings |
|---|---|---|---|---|---|
| **Flexible Learning Delivery** | 3.03 | 0.72 | Agree | **Effective** | Shows positive results in student engagement, participation, and communication. Students agree that flexible learning helps them acquire and apply new skills. Completion and retention rates are improving, though there is room for enhancement in long-term knowledge retention and consistent engagement across learners. |
| **Full Face-to-Face Learning Delivery** | 3.71 | 0.46 | Strongly Agree | **Very Effective** | Demonstrates very high effectiveness in student attendance, engagement, skill proficiency, and performance. Learners show stronger mastery in hands-on tasks, higher completion and graduation rates, and better alignment with industry needs. Employer satisfaction and workplace success of graduates are notably high. |

Technical Vocational Institutions (TVIs) show strong adherence to best practices in TVET delivery, reflected by a high composite mean score of 3.66 ("Strongly Agree"). Their key strengths include robust industry collaboration, with employers actively involved in curriculum development to keep training aligned with labor market needs. Competency-based and modular curricula are widely adopted to enhance graduate employability, while work-based learning such as internships provides valuable real-world experience. TVIs also focus on quality assurance through accreditation, monitoring, and employment tracking, ensuring high standards and graduate success. Inclusivity and accessibility are prioritized through flexible learning options for marginalized groups and working individuals. The high ratings across components demonstrate a comprehensive, industry-aligned, and inclusive approach supported by stakeholders like employers, communities, and government agencies. To improve further, TVIs should formalize long-term industry partnerships and regularly update curricula to keep pace with technological and market changes. Expanding flexible learning options, improving data systems for tracking graduates, and promoting accreditation will enhance program quality and graduate competitiveness. Continued collaboration with government bodies will align TVET with national goals and support innovation and scaling [48][42]. The perceived effectiveness of full face-to-face learning delivery, showing strong agreement across 14 aspects of student engagement, performance, and outcomes, with a composite mean score of 3.71. Mean scores range from 3.66 to 3.78, and low standard deviations (0.42–0.52) indicate consistent positive perceptions. Key strengths include increased student attendance (3.69), active participation in classroom activities (3.73), and enhanced student-instructor interactions (3.72), all highlighting the value of in-person engagement. Students also show improved proficiency in hands-on tasks (3.69) and perform better in practical assessments (3.74), reflecting the effectiveness of face-to-face learning in developing industry-relevant skills. Skills development (3.72), higher passing rates (3.67), and course completion (3.78) further demonstrate strong outcomes. Certification attainment (3.69) and application of skills in real-world contexts (3.73) underline the practical relevance of this delivery mode. Respondents also acknowledge the role of face-to-face learning in offering industry-driven exercises (3.66), promoting student retention (3.73), and supporting higher graduation rates (3.70). Employer satisfaction (3.76) and workplace success of graduates (3.66) indicate that students are well-prepared for employment. Overall, the findings suggest that full face-to-face learning delivery is highly effective in fostering student engagement, skill acquisition, and successful workforce integration. Its continued use is recommended as essential for maximizing student success and aligning training with industry standards.

**Question No. 6: What are the challenges the TVIs encounter in implementing the TVET Program in Dumaguete City?**

| Category | Main Challenges Identified | CM (X) | Verbal Description |
|---|---|---|---|
| 1. Government and Policy Support | Lack of government support and policy alignment | 3.29 | Strongly Agree |
| 2. Digital and Technological Gaps | Inadequate e-learning infrastructure, inaccessibility of digital resources, technological gaps in training | 3.11 | Agree |
| 3. Curriculum and Program Design | Curriculum rigidity, weak monitoring systems, mismatch between skills and job market, lack of competency-based education | 2.98 | Agree |
| 4. Trainer-Related Issues | Insufficient industry experience, inadequate professional development, and trainer shortages | 2.94 | Agree |
| 5. Industry Collaboration | Limited collaboration with industry partners | 2.96 | Agree |
| 6. Institutional Adaptability | Slow response to technological and educational changes | 2.88 | Agree |
| 7. Resources and Infrastructure | Limited budget, outdated facilities and equipment | 2.78 | Agree |
| 8. Access and Equity | Geographical barriers and digital inaccessibility | 2.99 | Agree |
| 9. Instructional Practice | Focus on theory over practice, lack of competency-based methods | 2.92 | Agree |

Technical and Vocational Education and Training (TVET) institutions face multiple challenges hindering effective program delivery, with a composite mean score of 2.98 indicating broad agreement. The most critical issue is the lack of government support and policy alignment, which limits funding, infrastructure, and coordination. Other challenges include inadequate digital resources, outdated training technologies, rigid curricula lacking competency-based focus, and weak alignment with job market needs. Trainer-related problems such as limited development, part-time staff, and shortages further affect quality instruction. Access issues in rural areas, weak industry collaboration, and slow adaptation to technology also persist.

These systemic and instructional barriers undermine TVET's ability to prepare students for employment, requiring urgent reforms. Participants highlighted these issues firsthand:

*P5 noted limited funding restricts access to updated equipment and weak industry coordination.*

*P7 and P37 pointed to shortages in training materials and supplies, limiting skill development.*

*P23 emphasized a lack of materials and monitoring.*

*P29 raised concerns about trainer availability and poor communication via email instead of meetings.*

*P71 and P75 mentioned outdated equipment and owners not meeting training standards.*

*P81 and P82 reported small facilities with limited space and non-functional equipment.*

These challenges must be addressed to improve TVET program quality, relevance, and student outcomes.

## SUMMARY OF FINDINGS

Over five years, scholarship allocations in Technical Vocational Institutions (TVIs) showed fluctuating trends across sectors. TVI R consistently received the highest grants, peaking at 4,598 scholarships in 2024, with strong focus on

sectors like Automotive, Agriculture, and Construction. Tourism (Hotel and Restaurant) and Human Health/Health Care were among the most active sectors, particularly at TVIs A, M, and C. Some sectors like Electrical and Electronics and ICT experienced significant fluctuations, while new TVIs had little to no scholarship allocation, indicating early development stages. Regarding training centers, 83.5% of participants attended private institutions, and many centers were relatively new, operating for 1–5 years. The Training for Work Scholarship Program (TWSP) was highly effective, well-aligned with labor market needs, and positively received. Similarly, the Special Training for Employment Program (STEP) and PESFA showed strong effectiveness, particularly in supporting marginalized groups and providing financial aid, respectively. The UAQTEA program also received high marks for improving accessibility and employability.

Best practices in TVET were strongly agreed upon, especially accreditation, competency-based education, industry partnerships, and inclusivity, ensuring graduates' relevance and employability. Flexible learning delivery was generally seen as effective, improving participation and skill acquisition, though some challenges remain in knowledge retention. Full face-to-face learning was rated most effective, excelling in student engagement, skill proficiency, completion, and employer satisfaction. Finally, key challenges identified include limited budgets, outdated equipment, skills-job market mismatches, slow technological adaptation, and insufficient trainer development. The highest-rated concern was lack of government support and policy alignment, underscoring the need for stronger funding and coordination to enhance TVET success.

## CONCLUSIONS

TVIs are strategically aligning scholarship allocations with key sectors like Tourism, Human Health, and Automotive, reflecting industry demands. However, inconsistent support in sectors such as Electrical and Electronics and ICT highlights the need for more balanced funding. Newly established TVIs require time to develop their programs, contributing to early gaps in scholarship distribution. All four major programs—TWSP, STEP, PESFA, and UAQTEA—are highly effective, demonstrating strong impacts on skills development, socio-economic improvement, and employability across diverse populations. Best practices emphasize industry engagement, curriculum alignment, and inclusivity as critical for TVET success. While flexible learning is effective, face-to-face delivery remains essential for optimal student outcomes. The greatest challenge identified is the lack of government support and policy alignment, underscoring the urgent need for improved funding and coordination to enhance TVET program effectiveness and workforce development.

## RECOMMENDATIONS

1. **Enhance Allocation in Declining or Inconsistent Sectors**: TESDA should revisit sectors such as Electrical and Electronics, ICT, and Agriculture to identify the reasons for fluctuating allocations.
2. **Address Regional Disparities**: TESDA must look into expanding scholarship programs and training opportunities in newly registered TVIs to ensure these centers are effectively integrated into the broader TESDA system and can meet local demands.
3. **Strengthen Public-Private Partnerships**: TESDA together with partnership linkages should explore collaborations with private institutions to improve training quality.
4. **Promote Sector-Specific Programs**: TESDA needs to check declining sectors, strategic initiatives such as targeted marketing or industry collaboration could help revitalize interest and demand.
5. **Expand Flexible Learning Delivery**: TVIs must widen its focus on addressing challenges such as knowledge retention and reducing program discontinuation rates to further improve its effectiveness.
6. **Invest in Technology and Infrastructure**: TVIs with identified challenges of outdated equipment and slow adaptation to technological changes should be addressed by increasing investment in modern training tools and technologies to better prepare students for the evolving workforce.
7. **Improve Professional Development for Trainers**: Trainers must strengthen their training and professional development to ensure they are well-equipped to deliver industry-relevant, high-quality education in line with the latest labor market demands.
8. **Increase Government Support and Policy Alignment**: Given the identified lack of government support and policy misalignment, TESDA must strengthen policy frameworks and increased funding for TVET programs is essential to address operational and financial challenges faced by training centers.
9. **Focus on Marginalized and Disadvantaged Sectors**: TVIs must register programs for implementation that would cater STEP and PESFA that showed positive impacts on marginalized sectors, so continued emphasis on inclusive training opportunities for these groups is recommended, with further outreach to ensure equitable access to educational resources.

By addressing these areas, the effectiveness and sustainability of TESDA's training programs can be further strengthened, ensuring they continue to meet the needs of both learners and employers.

## THREE-YEAR DEVELOPMENT PLAN

**Title:** "Enhancing the Implementation of Technical Vocational Education and Training (TVET) in Dumaguete City: A Strategic Three-Year Development Plan"

**Rationale:**

Technical Vocational Education and Training (TVET) play a critical role in equipping individuals with job-ready skills and promoting inclusive economic growth. In Dumaguete City, while TVET initiatives have demonstrated potential, gaps in sectorial support, institutional capacity, industry alignment, and equitable access remain. Declining performance in key sectors such as Agriculture, ICT, and Electronics; regional disparities in training access; and challenges in infrastructure and trainer competencies hinder the full impact of TESDA's programs.

This three-year development plan is designed to respond strategically to findings from the research titled *"Program Implementation of Technical Vocational Education and Training (TVET) in Dumaguete City: Basis for a Three-Year Development Plan."* It seeks to improve the effectiveness,

sustainability, and inclusivity of TVET through systematic reforms and targeted investments, ensuring that training programs align with labor market needs and provide meaningful opportunities for learners, especially from marginalized sectors.

**General Objective:**

To strengthen the implementation, relevance, and sustainability of Technical Vocational Education and Training (TVET) programs in Dumaguete City by enhancing sectorial focus, institutional capacity, public-private partnerships, inclusive access, and technological advancement over a three-year period.

**Specific Objectives:**

1. **To identify and address causes of declining enrollment and support in key TVET sectors** (e.g., ICT, Agriculture, Electrical and Electronics) through targeted sector revitalization strategies.
2. **To minimize regional and institutional disparities** by integrating and supporting newly registered TVIs and ensuring alignment with TESDA's training and quality assurance standards.
3. **To expand and formalize partnerships with private sector institutions and industries** in order to enhance curriculum relevance, employability, and on-the-job training opportunities.
4. **To increase awareness and participation in sector-specific programs** through marketing, advocacy, and community engagement initiatives.
5. **To broaden access to flexible learning delivery modes** (blended, modular, and online) to accommodate diverse learner needs and reduce program dropout rates.
6. **To modernize TVET training infrastructure and technologies** in under-resourced TVIs for better alignment with 21st-century workforce demands.
7. **To continuously develop trainers' competencies** through structured professional development, certifications, and exposure to industry practices.
8. **To align government support, TESDA policies, and funding mechanisms** with the actual operational and developmental needs of TVIs.
9. **To promote inclusive training programs targeting marginalized and disadvantaged sectors**, ensuring equitable access to education and employment pathways through STEP, PESFA, and other scholarship programs.

**Year 1: Foundation and Assessment (Capacity Building and Strategic Realignment)**

1. Sector Analysis and Planning
- Conduct Diagnostic Studies on declining sectors (Electrical and Electronics, ICT, Agriculture) to determine root causes of low enrollment and resource allocation.
- Initiate Sectorial Consultations with stakeholders and industry experts to gather feedback for revitalization plans.

2. Regional and Institutional Mapping
- Identify underserved areas and newly registered TVIs.
- Develop Baseline Data Reports on enrollment, completion rates, and employment outcomes.
- Design Integration Plan for new TVIs to align with TESDA standards and performance benchmarks.

3. Policy and Governance Review
- Review Existing TESDA Policies related to funding, training standards, and incentives.
- Align National and Local Government Unit (LGU) Objectives through consultative meetings and workshops.

4. Capacity Building for Trainers
- Conduct a National Training Needs Assessment (TNA) of trainers.
- Launch Pilot Trainer Upskilling Programs focused on pedagogy, technical skills, and digital literacy.

5. Strengthen Public-Private Dialogue
- Establish a TESDA-Dumaguete Industry Advisory Council (TDIAC) to identify key industry partners and start dialogues on collaboration.

6. Infrastructure and Technology Audit
- Audit TVI Facilities for equipment quality, internet access, and lab capacity.
- Draft an Infrastructure Improvement Plan per institution.

**Year 2: Implementation and Expansion (Resource Allocation, Program Delivery, and Partnerships)**

1. Revitalization of Declining Sectors
- Launch Targeted Marketing Campaigns (e.g., "Skills for Future" fairs) to promote Electrical, ICT, and Agriculture.
- Roll Out Specialized Programs in partnership with industry (e.g., agro-tech, smart farming, cyber security).

2. Flexible Learning Models
- Deploy Blended and Modular Learning Modes in pilot TVIs.
- Incorporate LMS (Learning Management Systems) to support remote learners.
- Provide Digital Access Support (devices, data) to marginalized learners.

3. Investment in Infrastructure
- Upgrade Equipment and Facilities in at least 50% of under-resourced TVIs.
- Procure Modern Training Tools for high-demand sectors.

4. Strengthening Partnerships
- Formalize MOUs with Private Institutions for dual training, job placement, and OJT programs.
- Develop TESDA Center for Industry Linkages (TCIL) in Dumaguete to centralize partnership efforts.

5. Inclusive Program Delivery
- Expand STEP and PESFA Scholarships in low-income barangays.
- Deploy Mobile Training Labs in remote or underserved communities.
- Develop Gender and Disability Inclusive Curricula.

6. Professional Development
- Implement Continuous Learning Credits System for trainers.
- Partner with Universities and International Organizations for advanced training and certifications.

**Year 3: Sustainability and Institutionalization**

1. Policy and Budget Reform
- Submit Budget Proposals to Congress/DOLE for increased TVET funding.
- Institutionalize Revised Policy Frameworks to address previous gaps in implementation and monitoring.

2. Monitoring and Evaluation (M&E) System
- Operationalize a Comprehensive M&E System that includes:
  - Key Performance Indicators (KPIs)
  - Feedback loops from employers and graduates

- Quarterly progress reviews

3. Sector Resilience Programs
- Sustainability Programs for Key Sectors: Launch long-term skill innovation centers focused on Agriculture and ICT resilience.
- Establish Sector-Specific Innovation Hubs within TVIs.

4. Technology and Digitalization
- Introduce AI/AR/VR-Based Learning in pilot courses.
- Digitize Training Manuals and TVET Resources for wider reach and continuous learning.

5. Institutional Sustainability
- Encourage TVIs to Apply for ISO Certification.
- Promote Research and Development (R&D) in skills development.
- Create TVET Alumni Associations to strengthen support networks and track employment outcomes.

6. Community Engagement
- Annual TVET Summits to celebrate milestones, share best practices, and foster innovation.
- Launch Local TVET Awareness Weeks in schools and barangays.

**Key Performance Targets by End of Year 3**

| Area | Target |
|---|---|
| 1. Enrollment in Declining Sectors | Increase by 40% |
| 2. Percentage of Modernized TVIs | 70% |
| 3. Trainer Upskilling Participation | 90% |
| 4. TVET Graduate Employment Rate | At least 80% |
| 5. Number of Active Private Partners | 50+ |
| 6. Inclusion of Marginalized Groups | 100% coverage in targeted barangays |
| 7. Flexible Learning Implementation | Adopted by 75% of TVIs |

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