



Communication Design Education Oriented Vocational Curriculum Framework

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Abstract. Without realizing it, our daily lives are filled with images, not only through the pictures plastered on billboards along the street, or through television and computer shows, but today everyone has their own screen in their hands. Advances in information technology have flooded us with information coming through the screens of our mobile phones. Behind the images we see on our cell phones is the enormous role of Communication Design. It is not surprising for us that currently Communication Design education is spreading in various cities throughout Indonesia, through various levels of education both Vocational, Bachelor, Master and Doctoral, it reflects that Communication Design education is needed in the era of information technology. Communication Design Education has a curriculum that is made to prepare personnel who can establish expertise and skills in the field of Communication Design ready to work and able to compete globally. Especially for vocational level communication design education, the curriculum must have a Link and Match with the Industrial World Business World (DUDI). The problem is whether the Frame work curriculum in the field of communication design at the vocational level in Indonesia is in accordance with the vocational curriculum framework. This is important to know in order to support the goals of vocational programs that can produce the latest innovations, trends, practical concerns, and can face challenges in the field of communication design at the vocational level. The research method uses descriptive, by analyzing the curriculum in the field of communication design at the vocational level in Indonesia through interviews, observations and literature studies. The results of the analysis found that most of the vocational curriculum frameworks are not in accordance with government policies through the Ministry of Education and Culture.

Keyword: Visual Communication Design, Graphic Design, Curriculum, Vocational.

1. Introduction

We live in a time where everything is visible, visually. Our world is filled with images, there is no information that does not use images, text and color combine into one unit in a bundle of information that appears through all types of screens, television, mobile phones, computers, videotrons or megatrons. The presence of the internet has triggered the development of information technology, and its presence facilitates human life. The ease of obtaining information through cell phones or the internet, the development of Information Technology spurs a new way of life, from life begins to ends, this kind of life is known as e-life, meaning that this life has been influenced by various needs electronically [1]. The combination of computer technology with telecommunications has produced a revolution in the field of information systems [2].

E-ISSN: 2830-0637





Information technology is used to process data, data processing by IT includes the process, how to get it, how to organize it, to store data to finally present accurate information that can help human work [3]. In this case, companies in the business world, government agencies and private institutions as well as non-governmental organizations in various fields utilize information technology to develop their institutions. One of the fields that utilizes advances in information technology is the creative industry.

According to the Ministry of Trade of the Republic of Indonesia, there are 15 creative industry sub-sectors, namely advertising, culinary, architecture, performing arts, art goods market, publishing and printing, crafts, research and development, fashion, music, television and radio, interactive games, computer services and software, design, and video, film and photography [4]. Advertising, publishing and printing, television, music, interactive games, design, video, film and photography are sub-sectors that are closely related to the role of the Communication Design field. Communication Design in the advertising, publishing and printing, television, music, interactive games, design, video, film and photography sub-sectors, through computer technology such as multimedia, animation, graphics, text, audio, plays an important role in advancing these sub-sectors to create messages that can influence others, produce works and create a pleasant impression [5]. It is the work of communication designers that fills the visuals on all the screens we have ever seen, from cell phone screens to megatrons. Creativity is the main element in the field of creative industries, related to this, it cannot be denied that in today's life, the field of Communication Design is a popular choice, a field that demands high creativity has high selling power, the needs of companies, government and private institutions require creativity in developing the company / institution through Communication Design. In the digital world, visuals are an important key in introducing a product. Visual touches of color, line, field, shape, typography, illustration, photography, chart, infographic, and layout become a means of communication that can attract consumers or the public [6].

Visual Communication Design plays an important role in the world of creative industries, career opportunities in this field are wide open. Visual Communication Design in the creative industry can support or help a company grow more rapidly [5]. The rapidly increasing career opportunities in the field of Communication Design have triggered the growth of Communication design study programs in various government and private universities in Indonesia. Based on data from the Higher Education Database (PDDikti) there are 30 Visual Communication Design study programs in stratum 1 (S1), two of which are D3 (Vocational) levels, and there are 17 Graphic Design study programs, stratum 1 (S1) totaling 4, D4 (Vocational) totaling 4, D3 (Vocational) totaling 9 [7]. Visual Communication Design and Graphic Design study programs at D4 or D3 or Vocational levels have different educational objectives from Strata 1 (S1). In general, vocational education (D4 and D3) aims to prepare students to become members of society who have the ability of professional experts in applying, developing, and disseminating technology and / or art and seeking its use to improve people's lives and enrich national culture [8]. To support the objectives of the vocational program, it must have students (HR) who are in accordance with the needs of the business world and the industrial world (DUDI) through preparing students who are skilled, qualified in their fields and a collaborative curriculum with DUDI, as well as supporting academic regulations. Vocational education curriculum is different from academic education curriculum (Strata 1). Vocational education is higher education that supports certain applied expertise, including Diploma 1, 2, 3 and 4 programs [9].

The Vocational Program contains a proportion of vocational learning of 60% practice and 40% theory, and a learning system in industry with a pattern of 3,2,1 for D3 and 5,2,1 for D4 [10]. Dual System Based Industrial Vocational Education is a learning method that prioritizes practice over learning theory, namely 70% practice and 30% theory [11]. With this proportion of learning, it is expected that the Visual Communication Design or Graphic Design Vocational study program can produce graduates who have aspects of technical and non-technical skills (soft skills) needed by graduates such as communication, leadership, and cooperation skills obtained from work in the industry. The current approach to vocational education still looks supply-driven, as if it seems to be done unilaterally by vocational education organizers. This is due to the rigid changes in vocational majors so that the

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E-ISSN: 2830-0637





curriculum is not able to keep up with the rapid development of the industry. As a result, industries complain that vocational education graduates do not meet their needs [12].

Based on these needs, it is necessary to see how the curriculum is contained in the Visual Communication Design or Graphic Design Vocational study programs in Indonesia, especially those in DKI Jakarta and West Java, this research is needed to see the curriculum as a vocational framework and standardized on the needs of the business world and the industrial world (DUDI). The purpose of this research is to find Vocational curriculum data and knowledge about the curriculum contained in the Visual Communication Design and Graphic Design study programs at State or Private Universities in DKI Jakarta and West Java.

2. Methods

According to Gall, Gall, &Borg, the purpose of descriptive research is to describe a phenomenon and its characteristics. This research is more concerned with what than how or why something has happened. Therefore, observation and survey tools are often used to collect data [13]. In this descriptive research, data collection is carried out related to the Visual Communication Design and Graphic Design Vocational curriculum in State or Private Universities in DKI Jakarta and West Java. Visual Communication Design Study Program is Trisakti University, Graphic Design Study Program is Politeknik Negeri Jakarta and Universitas Komputer Indonesia.

3. Results and Discussion

3.1 Map of Visual Communication Design and Graphic Design Education

Today, based on the writings of Smith, Moriarty, Barbatsis, Kenney, graphic design is part of the Applied arts [14]. Smith, Moriarty, Barbatsis, Kenney categorize Applied Arts into groups, one of which is Visual Communication which consists of three design groups such as Communication Design, Environmental Design and Industrial design (mass-produced objects). Graphic Design based on this theory is included in the Communication Design group which consists of Graphic design, Art director, Information design, Digital and Web design, Advertising, Illustration, Book design, Typographic design, Package / surface design, Logo, and Corporate and Brand Identity design. In Indonesia itself in the academic environment, especially in Bandung, the use of the term graphic design or visual communication design when referring to the theory of Smith, Moriarty, Barbatsis, Kenney, is actually still overlapping. In Indonesia, there are several terms used to name study programs in both public and private universities, namely Visual Communication Design, Graphic Design, Print Graphics, Computer Graphics and Graphic Engineering. However, Visual Communication Design and Graphic Design are more widely used.

The Faculty of Fine Arts and Design ITB, which in fact is a reference for design education in Indonesia, does not use the term graphic design in the name of the study program or group of expertise as part of the study program. As seen on its Faculty webpage, the Faculty of Fine Arts and Design consists of three departments, the Department of Fine Arts, the Department of Design and the Department of Sociotechnology. The Department of Design consists of Kria (Art) Study Program, Interior Design Study Program, Visual Communication Design Study Program (SK No. 218/DIKTI/Kep/1996) and Product Design Study Program and Master of Design Study Program [15]. In the Visual Communication Design study program there are also Visual Communication and Multi Media Expertise/Science Groups. Visual Communication Design Study Program in Bandung, such as at the University of Education Indonesia (UPI) at the Faculty of Art and Design Education, there is a Visual Communication Design (DKV) Study Program which was just born in 2018 [16]. National Institute of Technology (ITENAS), at the Faculty of Architecture and Design there is Visual Communication Design [17]. At Pasundan University, the Visual Communication Design Study Program is found at the Faculty of Arts and Letters [18]. At Telkom University there is a Faculty of Creative Industries, in which there is Visual Communication Design which is divided into 4 majors namely Graphic Design, Multimedia, Advertising and Designpreneur [19]. At UNIKOM, the Faculty of Design consists of two





study programs, namely Visual Communication Design for the Bachelor level and Graphic Design for Diploma 3 [20]. Visual Communication Design is found at the Maranatha Faculty of Fine Arts and Design [21]. BINUS Bandung has Visual Communication Design [22], and ITHB has Visual Communication Design with graphic design written as one of the career opportunities Career Opportunities [23].

PDDikti displays data for Visual Communication Design and Graphic Design search results consisting of 4 categories, namely based on the name of the College, Study Program, Lecturer and Student. In each category there is no data synchronization. To find out the number of Visual Communication Design and Graphic Design Study Programs, taken from 2 categories, namely the Higher Education and Study Program categories. Based on data contained in PDDikti [24], Visual Communication Design Study Programs in Indonesia, based on the category of the name of the Study Program consisting of S1 and D3 levels, there are 31 Study Programs from 31 State and Private Universities / Colleges. After analysis, only 12 study programs have active status.

Table 1. Data of Visual Communication Design Study Program from the category of Study Program Names in Indonesia

Based on PDDikti data

No.	Institutions	Levels	Provincial regions and web pages
1	Sekolah Tinggi Desain	S1	Bali
	Bali		https://www.idbbali.ac.id/desain-komunikasi-visual/
2	Universitas Dinamika	S1	Jawa Timur
	(STMIK Surabaya)		https://dkv.dinamika.ac.id/
3	Universitas Sampoerna	S1	DKI Jakarta
			https://www.sampoernauniversity.ac.id/academics/facult
			y-of-engineering-technology/visual-communication-
			design/
4	Universitas Trisakti	S1	DKI Jakarta
			https://dkv.fsrd.trisakti.ac.id/
5	Universitas TELKOM	S1	Jawa Barat
			https://telkomuniversity.ac.id/fakultas-industri-kreatif/
6	Universitas Tarumanagara	S1	DKI Jakarta
			https://untar.ac.id/program-sarjana/
7	Universitas Wiraraja	S1	Jawa Timur
			https://fisip.wiraraja.ac.id/
8	Universitas Trilogi	S1	DKI Jakarta
			https://admisi.trilogi.ac.id/program-studi
9	Universitas Paramadina	S1	DKI Jakarta
			https://www.paramadina.ac.id/desain-komunikasi-
			visual/page/130
10	Stiki Malang	S1	Jawa Timur
			https://dkv.stiki.ac.id/
11	Universitas Pasundan	S1	Jawa Barat
			https://fiss.unpas.ac.id/
12	Universitas Pertiwi	S1	Jawa Barat
			https://pertiwi.ac.id/ftk-s1desainkomvis/
13	Universitas Kuningan	S1	Jawa Barat
			https://uniku.ac.id/fkom/
14	Universitas Matana	S1	Banten
			https://matanauniversity.ac.id/desain-komunikasi-visual/

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E-ISSN: 2830-0637





15	Universitas Metamedia	S1	Sumatera Barat
			https://stmikindonesia.ac.id/
16	Universitas Presiden	S1	Jawa Barat
			https://admission.president.ac.id/p/182-about-president-
			university
17	Universitas Pradita	S1	Banten
			https://www.pradita.ac.id/programs/visual-
			communication-design
18	Universitas Bumigora	S1	Nusa Tenggara Barat
			http://dkv.universitasbumigora.ac.id/
19	Sekolah Tinggi Desain	S1	Jawa Barat
	Indonesia Bandung		https://www.stdi.ac.id/akademik#desain-kv
20	Institut Desain Dan Bisnis	S1	Bali
	Bali		https://www.idbbali.ac.id/desain-komunikasi-visual/
21	Universitas Negeri	S1	Sulawesi Selatan
	Makassar		http://dkv.fsd.unm.ac.id/

Data on universities with Visual Communication Design Study Programs based on data from the Directorate General of Higher Education, Research and Technology (Dirjen DIKTI) of the Ministry of Education, Culture, Research and Technology as follows.

	Kode PT	Perguruan Tinggi	Kota	Kode PS	Program Studi	Jenjang	2008	2009
	001-027	Universitas Sebelas Maret	Surakarta	90-241	Desain Komunikasi Visual	S-1	260	279
	001-033	Universitas Negeri Malang	Malang	90-241	Desain Komunikasi Visual	S-1	491	102
		Universitas Negeri Makassar	Makassar	90-241	Desain Komunikasi Visual	S-1	0	0
4	002-001	Institut Teknologi Bandung	Bandung	90-241	Desain Komunikasi Visual	S-1	207	148
5	002-005	Institut Seni Indonesia Yogyakarta	Yogyakarta	90-241	Desain Komunikasi Visual	S-1	318	405
6	002-007	Institut Seni Indonesia Denpasar	Denpasar	90-241	Desain Komunikasi Visual	S-1	284	317
7	011-042	Universitas Pelita Harapan Medan	Medan	90-241	Desain Komunikasi Visual	S-1	0	0
8	021-024	Universitas Indo Global Mandiri	Palembang	90-241	Desain Komunikasi Visual	S-1	14	44
9	031-015	Universitas Tarumanagara	Jakarta	90-241	Desain Komunikasi Visual	S-1	789	876
10	031-016	Universitas Trisakti	Jakarta	90-241	Desain Komunikasi Visual	S-1	649	583
	031-020	Universitas Persada Indonesia YAI	Jakarta	90-241	Desain Komunikasi Visual	S-1	558	572
12	031-033	Universitas Indonusa Esa Unggul	Jakarta	90-241	Desain Komunikasi Visual	S-1	159	2
13	031-034	Universitas Pelita Harapan	Tangerang	90-241	Desain Komunikasi Visual	S-1	754	693
14	031-038	Universitas Bina Nusantara	Jakarta	90-241	Desain Komunikasi Visual	S-1	1203	1652
15	031-041	Universitas Paramadina	Jakarta	90-241	Desain Komunikasi Visual	S-1	148	155
16	031-048	Universitas Bunda Mulia	Jakarta	90-241	Desain Komunikasi Visual	S-1	519	456
17	031-049	Universitas Indraprasta PGRI	Jakarta	90-241	Desain Komunikasi Visual	S-1	969	1163
18	031-051	Universitas Multimedia Nusantara	Jakarta	90-241	Desain Komunikasi Visual	S-1	138	135
19	032-002	Institut Kesenian Jakarta - LPKJ	Jakarta	90-241	Desain Komunikasi Visual	S-1	306	304
20	032-008	Institut Sains Dan Teknologi Al-Kamal	Jakarta	90-241	Desain Komunikasi Visual	S-1	13	24
21	033-184	Sekolah Tinggi Desain Interstudi	Jakarta	90-241	Desain Komunikasi Visual	S-1	350	495
22	033-195	Sekolah Tinggi Media Komunikasi Trisakti	Jakarta	90-241	Desain Komunikasi Visual	S-1	0	0
23	041-007	Universitas Kristen Maranatha	Bandung	90-241	Desain Komunikasi Visual	S-1	831	850
24	041-008	Universitas Pasundan	Bandung	90-241	Desain Komunikasi Visual	S-1	171	1038
25	041-027	Universitas Komputer Indonesia	Bandung	90-241	Desain Komunikasi Visual	S-1	893	991
		Universitas Ars Internasional	Bandung	90-241	Desain Komunikasi Visual	S-1	0	0
27	041-046	Universitas Informatika dan Bisnis Indonesia	Bandung	90-241	Desain Komunikasi Visual	S-1	9	6
28	041-047	Universitas Wanita Internasional	Bandung	90-241	Desain Komunikasi Visual	S-1	0	0
29	042-002	Institut Teknologi Nasional Bandung	Bandung	90-241	Desain Komunikasi Visual	S-1	485	418
30	042-006	Institut Teknologi Harapan Bangsa	Bandung	90-241	Desain Komunikasi Visual	S-1	334	353
31		Institut Manajemen Telkom	Bandung	90-241	Desain Komunikasi Visual	S-1	88	177
	043-053	Sekolah Tinggi Seni Rupa & Desain Indonesia	Bandung	90-241	Desain Komunikasi Visual	S-1	88	76
33	043-079	Sekolah Tinggi Desain Indonesia Bandung	Bandung	90-241	Desain Komunikasi Visual	S-1	38	42
34	053-039	Sekolah Tinggi Seni Rupa dan Desain Visi Indonesia	Yogyakarta	90-241	Desain Komunikasi Visual	S-1	0	64
35	061-001	Universitas Kristen Satva Wacana	Salatiga	90-241	Desain Komunikasi Visual	S-1	52	145
36	061-012	Universitas Katolik Soegijapranata	Semarang	90-241	Desain Komunikasi Visual	S-1	38	141
37	061-031	Universitas Dian Nuswantoro	Semarang	90-241	Desain Komunikasi Visual	S-1	397	501
	061-033	Universitas Sahid Surakarta	Surakarta	90-241	Desain Komunikasi Visual	S-1	40	39
	071-002	Universitas Kristen Petra	Surabaya	90-241	Desain Komunikasi Visual	S-1	937	943
	071-071	Universitas Ciputra Surabaya	Surabaya	90-241	Desain Komunikasi Visual	S-1	140	139
		Institut Informatika Indonesia Surabaya	Surabaya	90-241	Desain Komunikasi Visual	S-1	39	29
		Sekolah Tinggi Teknik Surabaya	Surabaya	90-241	Desain Komunikasi Visual	S-1	0	0
		STMIK Surabaya	Surabaya	90-241	Desain Komunikasi Visual	S-1	27	25
		Universitas Putra Indonesia YPTK Padang	Padang	90-241	Desain Komunikasi Visual	S-1	0	83
		Institut Sains dan Teknologi ISTPN	Padang	90-241	Desain Komunikasi Visual	S-1	0	0

Figure 1. Data on the number of Visual Communication Design study programs at 45 public and private universities.





The data contained in PDDikti does not contain complete data, there are still many universities that are not listed in PDDikti. Not all universities with Visual Communication Design Study Programs have been recorded, including Mercu Buana University Jakarta, Polimedia Kreatif Jakarta, Widyatama University Bandung, STMIK CIC Cirebon, University of Surabaya (UBAYA), Sepuluh Nopember Institute of Technology (ITS) Surabaya, STIKOM Surabaya, Surabaya State University (UNESA), Wilwatikta College of Arts Surabaya, Surabaya Institute of Applied Science and Technology, Indonesian College of Informatics and Computers Malang, Alaudin State Islamic University Makassar and several other universities. So it can be ascertained that the total number is certainly much more than what is stated in the data published by the Directorate of Academics of the Directorate General of Higher Education of the Ministry of Education and Culture [25].

Then what is Graphic Design, According to Pettersson, the practice of graphic design is as old as recorded history, as seen in books, magazines, packages, papers, posters, symbols, and many other products as a result of graphic design [26]. The definition of graphic design according to Shafig, as the art and profession of selecting and arranging visual elements, such as type, images, symbols, and colors, to convey messages to recipients [27]. Sometimes graphic design is called visual communication, a term that emphasizes its function of giving form, such as the design of books, advertisements, logos or websites, to information. Common uses of graphic design include, identity (logos and branding), website publications (magazines, newspapers, and books), advertising and product packaging. northernhighlands.org, writes graphic design as a form of visual communication, a message communicated with the use of any visual medium such as posters, business logos, magazine advertisements, or album covers, and others, and divides graphic design into image based design, type based design, image and type design, symbols, logos and logotypes [28]. Regarding graphic design and other naming within the visual design group, Pettersson states, over the past two centuries graphic design has been referred to as applied art, commercial art, communication design, graphisseni, and visual communication, this has reflected the expansion of communication media beyond the realm of graphic arts [26].

According to ADGI, the development of visual communication needs that are not limited to advertising applications, ITB and ASRI (ISI Jogja) separated Graphic Design from billboard art, and developed under the name Visual Communication Design [29]. Visual Communication Design is a term that evolved from graphic design. This happened because the word 'graphic' is often considered limiting and only for printed matter. In fact, graphic designers work with many media." [25]. Based on these things, of course, graphic design is generally grouped in the Visual Communication Design study program in Indonesian design education today based on its development. In addition to the role of the education sector, in the professional sector there is the role of Design Associations such as the Indonesian Graphic Design Association (ADGI) which has a vision of creating a healthy Indonesian graphic design industry and forming a strong Indonesian visual identity domestically and internationally [29]. AIDIA, the Indonesian Visual Communication Design Professional Association, Desain Grafis Indonesia (DGI), with a vision to foster understanding among Indonesian graphic designers in their intersection with art, design, culture, and society which is realized through the publication of information, archives, studies, and discussions and Asprodi DKV, through its vision and mission and programs to shape the face of Indonesian graphic design [30].

Graphic Design Study Programs in Indonesia, based on the category of Graphic Design Study Program names, are available for S1, D4, and D3 levels. The data is filtered again and can be seen in the following table.





Table 2. Data of Graphic Design Study Program from the category of Study Program Names in Indonesia Based on PDDikti data

No.	Institutions	Levels	Provincial regions and web pages
1	Universitas	D4	Jawa Barat
	Widyatama		https://grafis.widyatama.ac.id/
2	Universitas Brawijaya	D4	Jawa Timur
			https://vokasi.ub.ac.id/mengenal-program-studi-
			sarjana-terapan-desain-grafis-vokasi-ub/
3	Universitas Komputer	D3	Jawa Barat
	Indonesia		https://dg.unikom.ac.id/
4	Politeknik Negeri	D4	DKI Jakarta
	Jakarta		https://grafika.pnj.ac.id/readmore/602cee4b06c433602
			42895a3/program-studi-desain-grafis
5	Universitas Negeri	D3	Jawa Timur
	Surabaya		https://www.unesa.ac.id/page/akademik/fakultas-
			bahasa-dan-seni/d-iii-desain-grafis/kurikulum/desain-
			grafis-i/
6	Universitas Negeri	D4	Jawa Timur
	Surabaya		https://www.unesa.ac.id/page/akademik/fakultas-
			bahasa-dan-seni/d-iii-desain-grafis/kurikulum/desain-
			grafis-i/
7	Akademi Seni Rupa	D3	DIY Yogyakarta
	Dan Desain Akseri		https://msd.ac.id/d3-dkv-program-diploma-3/
8	Politeknik Negeri	D3	DKI Jakarta
	Media Kreatif		https://polimedia.ac.id/desain/
9	Akademi Teknologi	D3	DKI Jakarta
	Grafika Trisakti		https://www.trisaktimultimedia.ac.id/str-teknologi-
			grafika/

The results of data collection related to Study Programs with the name Visual Communication Design based on data from PDDikti are 21 Private and State Universities. Based on data from the Directorate General of Higher Education, Research, and Technology (Dirjen DIKTI) of the Ministry of Education, Culture, Research, and Technology in 2008-2009 there were 45. And additional unrecorded data as many as 12 public and private universities. The total number of Visual Communication Design Study Programs with Strata 1 level is 78. The results of data collection related to the Study Program with the name Graphic Design based on data from PDDikti are 9.

3.2 Link and Match between Vocational Education and the World of Business and Industry (DUDI)

The industrial world demands graduates of the Visual Communication Design and Graphic Design Vocational Study programs to become personnel who can establish expertise and skills in their fields, are ready to work and able to compete globally. For this reason, vocational education emphasizes education that is able to adjust to market demand (demand driven); kebersambungan (link) between users of education graduates and vocational education providers; and match (match) between employees and employers [12]. The understanding of link & match between education and industry is different. The education world sees that the industrial world must contribute to education as a form of social care, while the DKV industry sees that even educational institutions have become industries, no longer educational institutions like in the days of Ki Hajar Dewantara [25]. The existence of an industry that





makes a profession exist. Professions exist because there is an industry, because there is a profession, there is an educational institution that educates someone to become a certain profession [25].

The implementation and measurement of the success of vocational education can be seen from the level of quality and relevance, namely the number of absorption of graduates and the suitability of the field of work with the field of expertise [12]. The Director General of Vocational Education said that vocational education is one of the government's focuses in producing superior human resources (HR). This is also evidenced by the Presidential Instruction and Regulation regarding the implementation of vocational education. "The Presidential Instruction and Presidential Regulation on vocational education show that the President has high hopes for the advancement of vocational education," [31].



Figure 2. Link and Match Diagram.

In this regard, the Directorate General of Vocational Education (DIKSI) encourages Vocational Education and the Industrial World to develop a joint curriculum, professional personnel teach regularly as guest lecturers, have a jointly managed internship program, have a bridging program, have competency certification for graduates, the industry provides laboratory equipment assistance to education, joint research, has a scholarship program and service bonds for students and has a joint commitment to realize the link and match between industry and education [32]. Wikan Sakarinto, Director General of Vocational Education explained, this link and match is carried out so that vocational study programs in Indonesia can produce graduates with quality and competence in accordance with the needs of the industrial world and the world of work [32].

4. Vocational Visual Communication Design and Graphic Design Curriculum in Indonesia.

The Ministry of Research, Technology and Higher Education (KEMENRISTEKDIKTI) encourages the expansion of dual system curriculum implementation to accelerate the revitalization of vocational higher education in Indonesia. There are three things that must be encouraged to revitalize vocational higher education in addition to expertise certification, namely, preparing the availability of teaching staff consisting of 50% academic lecturers, and 50% lecturers from industry practitioners, retraining existing vocational lecturers, and implementing the dual system concept [33]. The formation of an ideal and actual curriculum is needed by students to keep pace with the times and intellectual challenges.

Curriculum development with the world of work / industry aims to align the competencies taught in the education unit with the needs of the world of work / industry. This curriculum alignment must include strengthening vocational education competencies (hard skills), soft skills aspects and work





character according to the needs of the world of work. In the curriculum developed with the world of work / industry, material that is not relevant in the world of work is compacted and reduced, because students are "not required" to become experts in all fields / materials. Therefore, in the new curriculum, foundation subjects are applied in semesters 1-2. Meanwhile, in semester 3 onwards, vocational learning is carried out based on real projects found in the industry / consumers / partners. Thus, soft skills and characters needed in the world of work are expected to be trained since school. The Vocational Study Program Head is obliged to determine the core curriculum which contains knowledge, general and specific skills determined by professional organizations or associations of allied institutions with a range of 40-80% of the total credits.

INTEGRASI PENDIDIKAN VOKASI DAN DUNIA KERJA Dilaksanakan Melalui Link and Match 8+i



Figure 3. Link and Match Policy

Curriculum means an educational program that contains various teaching materials and learning experiences that are programmed, planned and systematically designed on the basis of applicable norms and used as guidelines in the learning process for educators to achieve educational goals [34]. In contrast to the curriculum in academic path education, the vocational curriculum must be flexible, vocational must develop self-skills as the industrial world progresses [35]. In addition to being flexible, the vocational curriculum must be able to meet the needs of the Business World and the Industrial World, the Vocational curriculum is made jointly by the industry and educational institutions so that there is a link and match between the competencies taught at educational institutions and the needs of the industrial world, especially the Visual Communication Design or Graphic Design industry. To find out the suitability, link and match, it is necessary to look at the curriculum at State or Private Universities as a case study, namely the curriculum contained in the Visual Communication Design Study Program, namely Trisakti University, Graphic Design Study Program, namely Politeknik Negeri Jakarta and Universitas Komputer Indonesia. The following is an analysis of the three curricula (see Table 3, 4 and 5).





Tabel 3. Curriculum of Visual Communication Design Study Program Trisakti University Source: https://dkv.fsrd.trisakti.ac.id/tentang/kurikulum/

EMESTER	KODE MK	MATA KULIAH	вов	ОТ	PRASYARAT			Jum
11.		Pendidikan Agama	2			11	UKD62	202 Kew Dem
	UAG6201	Pendidikan Agama Islam						Man
								(Kev
	UAG6202	Pendidikan Agama Kristen						Kade
	UAG6203	Pendidikan Agama Katholik					UBA63	801 Bah
	UAG6204	Pendidikan Agama Budha					DKS62	07 Kom
	UAG6205	Pendidikan Agama Hindu					DPS63	08 Nirm
	UAG6206	Pendidikan Agama Konghucu						
	UBN6200	Bahasa Indonesia	2				DKS63	
	UPA6200	Pancasila	2				DKS63	110 Kom
	DKS6201	Teori Dasar Seni Rupa	2				DKS66	III Dest
	DKS6202	Sejarah DKV	2					Jum
	DKS6303	Nirmana Datar	3					
	DKS6304	Studi Warna	3					
	DKS6305	Gambar Bentuk	3					
	DKS6306	Gambar Eksploratif	3					
		Jumlah	22 s	ks				
111	DKS6212	Semiotika DKV	2			IV.	DKS6296	Psikologi S
	DK\$6313	Ilustrasi Dasar	3				00007	Metodolog
	DKS6314	Fotografi Dasar	3				DOUBS	Fintagrufi /
	DKS6315	Komputer Grafis Digital Imaging	3					Pliftein DK
		Pilihan DKV 1	3				DKP6303 DKP6304	Moke-up I
	DKP6301	Komputer Grafis 3D					DK06603	
	DKP6302	Audia Design					400000	Desgin Gr
	DKG6601	Merencana Grafis Informasi (K. Desain Grafis) ^	6	DKV	Dasar: C		DKM6603	Merencian
	DKM6601	Merencana Multimedia Dasar					0000004	Reprograf
	Drimotor	(K.Multimedia) ^^					DKME304	Pra Produi
	DKG6302	Tipografi Aplikatif (K. Desain Grafis) ^	3	Tipo	grafi Dasar: C		EX100305	funtari A
	DKM6302	Video Editing (K.Multimedia) ^^					\$KM6305	Animali D
		Jumlah	23 sks					Jurelah
		Jumun	23 5K5					Juneary

11	UKD62	02 Kewarganegaraan, Kebangsaar Demokrasi dan Hak Asasi Manusia (Kewarganegaraan dan Kadeham)	. 2
	UBA63	01 Bahasa Inggris	3
	DKS62	07 Komunikasi	2
	DPS63	08 Nirmana Ruang	3
	DKS63	09 Tipografi Dasar	3
	DKS63	10 Komputer Grafis Vector	3.
	DKS66	11 Desain Komunikasi Visual Dasar	6
		Jumlah	22 sks
			s
ıy	DKS6016	(Carlot and San	
N.	DKS606		2
N		Netodologi DIV	
W	0K9697 DK1698	Metodologi DKV Entografi Aprillatif Fillman EKV 2	
W	2KH4387 2KH4388 2KH4303	Metodologi DKV Entografi Apriliatit Filman DKV 2 famel Chaffe	t Finografi Dasar C
W	DK1628 DK1628 DK16202 DK16202	Metodologi DKV Fintografi Aprillatit Fintografi Aprillatit Fintografi Aprillatit Make-up Klandker	B Fishografi Distatir C
W	2KH4387 2KH4388 2KH4303	Metodology DKV Fintografi Aprillatit Fillman DKV 2 Tameel Drafts Moke-up Karokter Merencono Grafts (dentitios (K. Dessin Grafts) ^	t Finografi Dasar C
W	DK1628 DK1628 DK16202 DK16202	Metodology DKV Entografi Aprillodd Plantan DKM 2 famoel Drafia Molke-up Klanditler Merengong Grafia Identitios (K.	E Fistografi Dasar C Merencana Grafis Info
W.	2K16287 2K16288 2K16262 2K162624 CK066603	Mehodologi DKV Fintografi Aprillodd Fillifian DKV 2 Tenset Chaffs Moker-up Klaratter Merencono Grafia Identifice (K. Desum Grafia) ^ Merencono Multimedio Lispermentali (K.Multimedio) ^^	E Fistografi Dasar C Merencana Grafis Info
N.	DICHESTS DICHESTS DICHESTS DICHESTS DICHESTS DICHESTS DICHESTS DICHESTS DICHESTS DICHESTS	Metodologi DKV Fintografi Aprilladd Filliam DKV 2 Tamel Chaffs Moker-up Narakter Merencono Grafia Identitios (K. Desum (Kodis) A. Merencono Multimedio (Lapermentali (K.Multimedio) A.A. (Lapermentali (K.Multimedio) A.A.	E Fistografi Dasar C Merencona Grafis Info- Merencona Multimedic C

23 sks

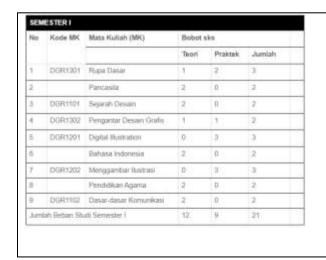




		Jumlah	23 sks	N	W	D#56-602	Servician	4.	Bahasa Indenseta: C Metodologi Penelitian: C
٧	2855301	Melodologi Peneltian	1			UNIVERSE	Kewhaushaan	1	
	EKUSHO.	Diretto	2.						
	2818220	Teknik Presentosi	1			D456322	Papita Selekta		
	DOMEST	Postlelo Davigo	8.			DK06608	Merencono Grafa Sould (K Desain Grafs) n		Merencona Orafis Komensia Merencona Multimedia
	DK06600	Merencona Orafia Komersiali (K.Desam Grafis) #	63	Merencono Orofis identificio C Verencono Multimedio		Denesions	Merencona Multimedia Sosial (Catultimedia) nri		formerstat C
		Merencana Multimedia Komersial		Etaperimental C		DK06006	Brook Design (K.Desdin Ordfis) A	1	
	2KM6606	(KANJSmedia) ^^				DOMESTOD	Web Design (KNautimedia) An		
	DKM6307	Packaging Sweign (K.Sweidn Grafis) A	3				Hhan2	2	
	ansessor.	Nim Anmasi (K.Multimedia) A4				DEPERSON	suse-ITT Schoolinggris 100FLPhe Test		
		Hiton I	T)			DFP6268	Sent Cetup Roll Seni Kerorolk		
	DEPRIOR	Bathavistinggris 108% Preparation Sans Bath				DENESTER	Konseptual Fotografi		
	0776003	Creative Drawing					Jumlah	21 sks	
	SYMPOON	Simo Cult							
	0476205	Street Photogropmy							
		Jurolah	27 (4)						
W	DK\$6400	Kerjo Profesi	*:	Merencana Grafti Sessat C Merencana Muterradia Social C					
		Jumleh	Asks						
W	DWSOHEE	Tugos Aktir/Ukripsi	1.	Karjo Profest. C					
		Jumlah	8 sks						
		Total	144sks						

Result: the total percentage of theoretical credits is 34% and practical credits is 66%.

Tabel. 4. Curriculum of Graphic Design Study Program Politeknik Negeri Jakarta Source: https://grafika.pnj.ac.id/readmore/602cee4b06c43360242895a3/program-studi-desain-grafis.



No	Kode MK	Mata Kuliah (MK)	Bobot sks				
			Teori	Praktek	Jumlah		
1	DGR2101	Pengantar Desain Kemasan	2	0	2		
2	DGR2102	Toon Desain	2	0	3		
3	DGR2302	Tipografi	2	1)	3		
4	DGR2201	Fotografi	0	3	2		
5		English	2	0	2		
6	DGR2102	Pengetahuan Teknologi Cetak	2	0	2		
7	DGR2202	Digital maging	0	3	3		
В		Pendidikan Kewarganegaraan	2	0	2		
lores	ah Behen Sh	uti Semester II	12	7	19		





No	Kode MK	Mata Kullah (MK)	Bobot sks			
			Teori	Praktek	Jumlah	
1	DGR3381	Teknik Presentasi	4	1.	2	
2	DGR3302	Desam Layout	1	2	2	
3	DGR3102	Perklanan	2	0	3	
4	DGR3303	Metodologi Desain	1	1	2	
5	DGR3103	Pengetahuan Material Desain	2	0	3	
6	DGR3104	Pengetahuan Budaya dan Lingkungan	2	0	2	
7	DGR3201	Digital Layout	0	3	3	
B	DGR3304	Struktur Kemasan	7	to	3	
Lon	feb Caboo Sh	di Semester III	12	6	19	

No	Kode MK	Mata Kuliah (MK)	Bubot s	Bobot sks			
			Teori	Praktek	Jumlah		
1	DGR4101	Metode Perufisan Laporan	2.	0	2		
2	DGR4301	Metode Riset Desain	2:	3.	.a.		
3	DGR4201	Prepress	0.0	2	2		
4	DGR4302	Inovasi Komasan	1.	1	2		
5	DGR4303	Kowrausshaan	1.	.1	2		
6	DGR4102	Hukum dan Etika	2	0	2		
7	DGR4103	Pentaku Konsumen	2	.0	2		
15	DGR4104	Komunikasi Pemasaran	2	0	2		
	DGR4304	Manajemen Desain	1	1	2		

No	Kode MK	Mata Kuliah (MK)	Bobot sks				
			Teori	Praktek	Jumlah		
1	DOR5201	PIQ. (MBRM)	0	20	20		
2		Komputer Graffs		3			
3		Manajerieri Proyek Desain		3			
4		Proyek Design		6			
5		Proses Produksi Desan		3.			
6		Pinufisan Liiporan PRI,		5			
Jun	itah Beban S	Studi Semester V	0	20	20		

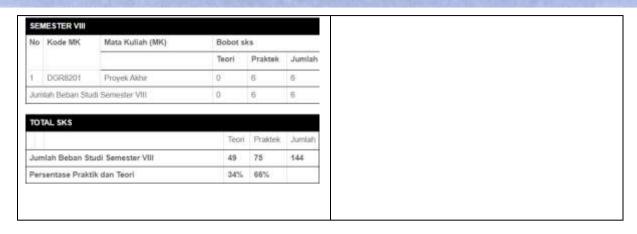
No	Kode MK	Mata Kullah (MK)	Bobot	sks	kts		
			Teori	Praktek	Jumlah		
4	DGR6201	Proyek Utama	D	50	20		
2		Komputer Grafis		3.			
3		Managemen Proyek Desain		3			
4		Proyek Desain		5			
5		Proses Produksi Desain		1			
8		Teknik Presentasi		3			
		Penalisas Laporam.		19.			
Jums	lah Beban St	udi Semester VI	0	20	20		

No	Kode MK	Mata Kullah (MK)	Bobot sks			
			Teori	Praktek	Jumlah	
1	DGR7201	Proyek Kewinusahaan	0	20	20	
2		Kewirausahaan		5		
3		Branding		4		
4		Karkulasi		2		
5		Manajemen Sisnis		36		
6	2.4	Komunikasi Pemasaran		4		
Jun	nah Beban St	tudi Semester VII	0	20	20	

No	Kode MK	Mata Kuliah (MK)	Bobot sks			
			Teori	Praktek	Jumlah	
1	DGR7202	Proyek Pienelitian Desain Grafts	0	28	20	
2		Metode Heat Ocean		6		
3		Perohim Laponin		6		
4		Teknik Presentani		3		
5		Seminar		Ti-		
Jumlah Betian Studi Semester VII		0.	20	20		







Result: the total percentage of theoretical credits is 34% and practical credits is 66%.

Table 5. Curriculum of Graphic Design Study Program of Universitas Komputer Indonesia. Source: https://dg.unikom.ac.id/akademik/

NO	KODE MK	SEMESTER I	SKS
1	21056	PENGENALAN KOMPUTER (MS OFFICE)	2
2	21007	MENGGAMBAR I	4
3	21073	NIRMANA	4
4	21006	KOMPUTER APLIKASI IT	2
5	21055	STUDI KREATIF	2
6	21059	PENGANTAR DESAIN GRAFIS	2
7	00001	AGAMA	2
		Jumlah SKS / Total Credit	18

NO	KODE MK	SEMESTER II	SKS
1	21074	KOMPUTER APLIKASI ILUSTRASI VEKTOR	2
2	21013	MENGGAMBAR II	-4
3	21062	STUDIO DESAIN GRAFIS I	4
4	21075	KOMPUTER APLIKASI SUNTING GAMBAR	2
5	00002	BAHASA INDONESIA	2
6	21076	PANCASILA & KEWARGANEGARAAN	3
7	00004	BAHASA INGGRIS	2
	-	Jumlah SKS / Total Credit	19





NO	KODE MK	SEMESTER III	SKS
1	21064	STUDIO DESAIN GRAFIS II	4
2	21024	TIPOGRAFI I	3
3	21021	FOTOGRAFI I	2
4	21025	ILUSTRASI I	3
5	21077	KOMPUTER APLIKASI DESAIN TATA LETAK	2
6	21053	TEKNIK CETAK	2
7	21078	KOMPUTER APLIKASI DESAIN APPS & WEBSITE	2
	1	Jumlah SKS / Total Credit	18
ю	KODE MK	SEMESTER IV	SKS
1	21082	STUDIO DESAIN GRAFIS III	5
2	21032	TIPOGRAFI II	3
3	21030	FOTOGRAFI II	2
4	21034	ILUSTRASI II	3
5	21065	MULTIMEDIA INTERAKTIF I	3
6	21066	SINEMATOGRAFI I	2
7	21079	KOMPUTER APLIKASI SUNTING FILM & EFEK VISUAL	2
		Jumlah SKS / Total Credit	20
O	KODE MK	SEMESTER V	SKS
1	21080	STUDIO DESAIN GRAFIS IV	5
2	21069	SINEMATOGRAFI II	2
3	21042	MULTIMEDIA INTERAKTIF II	3
4	21070	PENELITIAN DESAIN	3
5	21044	KERJA PRAKTEK	2
6	00007	ANIMASI DAN MULTIMEDIA	3
		Jumlah SKS / Total Credit	18
10	KODE MK	SEMESTER VI	SKS
1	21050	TUGAS AKHIR	5 K3
2	21050	KOMUNIKASI MEDIA	2
3	21083	ANIMASI DAN MULTIMEDIA LANJUT	2
4	21003	HARDWARE	3
		ETIKA PROFESI DESAIN GRAFIS	2
5	21081		

Results: the total percentage of theoretical credits is 38% and practical credits is 62%.

5. Conclusion

The results of Study Programs with the name Visual Communication Design based on data from PDDikti are 21, and from the Directorate General of Higher Education, Research, and Technology (Dirjen DIKTI) of the Ministry of Education, Culture, Research, and Technology in 2008-2009 there were 45. And additional unrecorded data as many as 12 public and private universities. The total number of Visual Communication Design Study Programs with Strata 1 level is 78. The results of data collection related to the Study Program with the name Graphic Design based on data from PDDikti are 9. In terms of the percentage component of practice and theory in accordance with the Vocational rules from the government of 60% practice and 40% theory or 70% practice and 30% theory, the results obtained are the Curriculum of the Visual Communication Design Study Program of Trisakti University, the percentage of theory credits is 34% and practice credits is 66%, the Curriculum of the Graphic Design

Jumlah SKS / Total Credit

18





Study Program of Politeknik Negeri Jakarta, the percentage of theory credits is 34% and practice credits is 66%, the Curriculum of the Graphic Design Study Program of Universitas Komputer Indonesia, the percentage of theory credits is 38% and practice credits is 62%. It can be concluded that the curriculum of the three Visual Communication Design and Graphic Design Vocational Study Programs is in accordance with the Vocational curriculum.

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