**Lampiran Kisi-Kisi Instrumen Kuesioner *Pedagogical Content Knowledge* (*PCK*)**

**Kisi-Kisi Instrumen Kuesioner *Pedagogical Content Knowledge* (*PCK*)**

Definisi operasional *PCK*: *knowledge of representing content knowledge and adopting pedagogical strategies to make the specific content/topic more understandable for the learners.*

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| **No** | **Komponen *PCK*** | **Nomor Soal** | **Bentuk pernyataan yang diadopsi dari referensi** |
| 1 | Orientasi terhadap pengajaran sains | 1 | Saya dapat memilih pendekatan pengajaran yang efektif untuk membimbing pemikiran dan pembelajaran siswa dalam sains |
| 2 | Pengetahuan tentang karakteristik siswa | 6 | Saya dapat mengatasi kesulitan belajar siswa untuk topic materi IPA tertentu |
| 7 | Saya dapat mengatasi kesalahpahaman/ miskonsepsi siswa terhadap topic materi IPA tertentu. |
| 8 | Saya dapat memberikan kesempatan kepada siswa untuk melakukan praktikum tentang materi IPA. |
| 13 | Saya dapat membantu siswa dalam memahami materi IPA melalui berbagai macam cara. |
| 3 | Pengetahuan tentang strategi pembelajaran dan representasi instruksional | 4 | Saya dapat menggunakan berbagai model pembelajaran untuk mengajar materi IPA. |
| 5 | Saya dapat menggunakan berbagai metode pembelajaran untuk mengajar materi IPA. |
| 12 | Saya dapat menggunakan berbagai pendekatan pembelajaran untuk mengajar materi IPA. |
| 4 | Pengetahuan tentang kurikulum | 2 | Saya dapat mengajar materi IPA mengacu kerangka kurikulum 2013. |
| 3 | Saya dapat mengidentifikasi tujuan pembelajaran setiap topik pada materi IPA di setiap jenjang kelas. |
| 5 | Pengetahuan tentang penilaian pembelajaran | 9 | Saya dapat memilih alat penilaian yang sesuai untuk mengevaluasi pembelajaran siswa pada materi IPA. |
| 10 | Saya dapat menentukan jenis konsep ilmiah apa yang perlu dinilai secara spesifik pada materi IPA. |
| 11 | Saya dapat menentukan jenis keterampilan apa yang perlu dinilai untuk pembelajaran tertentu pada materi IPA. |

Sumber: Schimdt (2009:133); Bilici, et al (2013:58); Jun Jie Tseng (2014:14); C.Scott&Nimon (2020:14)

**Lampiran 2 Kisi-Kisi Instrumen Kuesioner *Technological Content Knowledge* (*TCK*)**

**Kisi-Kisi Instrumen Kuesioner *Technological Content Knowledge* (*TCK*)**

Definisi operasional *TCK*: *knowledge about how to use technology to represent/research and create the content in different ways without consideration about teaching.*

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| **No** | **Komponen *TCK*** | **Nomor Soal** | **Bentuk pernyataan yang diadopsi dari referensi** |
| 1 | Pengetahuan tentang ICT (perangkat keras dan perangkat lunak) dalam pembelajaran | 1 | Saya dapat menyiapkan model yang digunakan dalam mempersiapkan pembelajaran IPA dengan menggunakan teknologi (seperti perangkat lunak, animasi, grafik dan sebagainya). |
| 4 | Saya dapat menjelaskan keuntungan menggunakan teknologi dalam pembelajaran IPA. |
| 2 | Penerapan ICT dalam pembelajaran | 2 | Saya dapat memanfaatkan alat-alat teknologi dalam proses pembelajaran, seperti Ph meter, amperemeter, mikroskop dan sebagainya. |
| 3 | Saya dapat menggunakan alat teknologi (misalnya *spreadsheet*, *computer*) untuk mengolah nilai dan menganalisis data ilmiah. |
| 7 | Saya dapat menggunakan teknologi yang tepat untuk media pembelajaran IPA. |
| 3 | Kemampuan mengelola konten pembelajaran berbasis teknologi | 5 | Saya dapat menggunakan bahan ajar digital untuk mempermudah siswa dalam memahami materi IPA. |
| 6 | Saya dapat menggunakan program perangkat lunak yang dibuat khusus untuk mata pelajaran IPA. |

Sumber: Bilici, et al (2013:58); Jun Jie Tseng (2014:14); C.Scott&Nimon (2020:14)

**Lampiran Kisi-Kisi Instrumen Kuesioner *Technological Pedagogical Knowledge* (*TPK*)**

**Kisi-Kisi Instrumen Kuesioner *Technological Pedagogical Knowledge* (*TPK*)**

Definisi operasional *TPK*: *knowledge of the existence and spesiifications of various technologies to enable teaching approaches without reference towards subject matter.*

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| **No** | **Komponen *TPK*** | **Nomor Soal** | **Bentuk pernyataan yang diadopsi dari referensi** |
| 1 | Penggunaan TIK dalam menyusun rencana pembelajaran | 1 | Saya dapat menentukan jenis teknologi yang sesuai untuk tingkatan kelas siswa. |
| 2 | Saya dapat menjelaskan cara menggunakan teknologi dalam rencana pembelajaran IPA yang telah disusun. |
| 2 | Penggunaan TIK dalam proses pembelajaran | 3 | Saya dapat menjelaskan pengelolaan ruang kelas yang dilengkapi dengan teknologi. |
| 4 | Saya dapat menjawab pertanyaan siswa tentang penggunaan teknologi saat pembelajaran. |
| 5 | Saya dapat memanfaatkan perangkat teknologi untuk membuat proses pembelajaran menjadi lebih produktif. |
| 6 | Saya dapat menjelaskan bagaimana teknologi mempengaruhi proses pembelajaran siswa. |
| 8 | Saya dapat menggunakan teknologi untuk meningkatkan motivasi belajar siswa. |
| 9 | Saya dapat menggunakan teknologi dalam kegiatan pembelajaran IPA. |
| 10 | Saya dapat menggunakan teknologi agar proses pembelajaran menjadi lebih interaktif. |
| 11 | Saya dapat menggunakan teknologi untuk memfasilitasi kegiatan belajar mengajar. |
| 12 | Saya dapat menggunakan teknologi yang sesuai dalam rencana pembelajaran IPA yang telah disusun. |
| 13 | Saya dapat memfasilitasi siswa untuk menemukan teknologi informasi yang tepat sebagai sarana pembelajaran IPA. |
| 15 | Saya dapat memfasilitasi siswa menggunakan teknologi untuk membangun berbagai bentuk representasi pengetahuan. |
| 3 | Penggunaan dalam penilaian pembelajaran | 7 | Saya dapat menilai proses pembelajaran siswa dengan bantuan teknologi |
| 14 | Saya dapat saya dapat memfasilitasi siswa menggunakan teknologi untuk merencanakan dan memantau pembelajaran mereka. |

Sumber: Bilici, et al (2013:57-58); Jun Jie Tseng (2014:14); C.Scott&Nimon (2020:14)

**Lampiran Kisi-Kisi Instrumen Kuesioner *Technological Pedagogical and Content Knowledge* (*TPACK*)**

**Kisi-Kisi Instrumen Kuesioner *Technological Pedagogical and Content Knowledge* (*TPACK*)**

Definisi operasional *TPACK*: *knowledge of using various technologies to teach and/represent and facilitate knowledge creation of specific subject content.*

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| **No** | **Faktor *TPACK-deep scale*** | **Nomor Soal** | **Bentuk pernyataan yang diadopsi dari referensi** |
| 1 | Design | 1 | Saya dapat meng-*update* */* memperbaharui cara mangajar dengan menggunakan teknologi yang disesuaikan dengan keadaan siswa dan keadaan lingkungan sekolah. |
| 2 | Saya dapat menggunakan teknologi untuk melakukan proses pembelajaran IPA disesuaikan dengan kebutuhan siswa. |
| 3 | Saya dapat menggunakan teknologi untuk mengembangkan aktifitas siswa dalam meningkatkan proses pembelajaran IPA di kelas |
| 4 | Saya dapat merencanakan proses pembelajaran materi IPA mengacu kepada penggunaan berbagai sumber teknologi. |
| 5 | Saya dapat membuat media pembelajaran IPA berbasis teknologi untuk meningkatkan kualitas pembelajaran. |
| 6 | Saya dapat mengoptimalisasi waktu proses pembelajaran dengan menggunakan teknologi (misalnya *virtual labs*, *software* pembelajaran dan sebagainya). |
| 7 | Saya dapat mengembangkan perangkat penilaian pembelajaran IPA dengan menggunakan teknologi. |
| 8 | Saya dapat mengkombinasikan berbagai metode, model pembelajaran dan berbagai teknologi untuk menjelaskan materi IPA. |
| 9 | Saya dapat menggunakan teknologi dalam merancang kegiatan pembelajaran IPA agar proses pembelajaran menjadi lebih aktif. |
| 2 | *Exertion* | 10 | Saya dapat mengelola pembelajaran IPA yang tepat dalam memanfaatkan teknologi. |
| 11 | Saya dapat menerapkan manajemen kelas yang efektif dalam proses belajar mengajar dengan memanfaatkan teknologi. |
| 12 | Saya dapat menggunakan teknologi untuk menilai apakah siswa memiliki pengetahuan konten materi IPA yang sesuai. |
| 13 | Saya dapat menerapkan pendekatan dan metode pembelajaran IPA yang sesuai dengan karakterstik siswa menggunakan bantuan teknologi. |
| 14 | Saya dapat menggunakan teknologi untuk implementasi aktivitas pembelajaran IPA seperti tugas rumah, proyek dan sebagainya. |
| 15 | Saya dapat menggunakan teknologi komunikasi. |
| 16 | Saya dapat menggunakan teknologi untk mengevaluasi pencapaian materi IPA pada siswa. |
| 17 | Saya dapat memberikan akses teknologi yang sama kepada seluruh siswa untuk menjelaskan materi IPA. |
| 18 | Saya dapat membimbing siswa dalam proses merancang produk berbasis teknologi, seperti presentasi, video dan sebagainya. |
| 19 | Saya dapat menggunakan teknologi inovatif (*facebook, blogs, twitter,* dan sebagainya) untuk mendukung proses pembelajaran IPA. |
| 20 | Saya dapat menggunakan teknologi untuk memperbaharui pengetahuan dan keterampilan saya pada materi IPA yang akan saya ajarkan. |
| 21 | Saya dapat memperbaharui pengetahuan teknologi yang saya miliki untuk dapat meningkatkan proses pembelajaran. |
| 22 | Saya dapat menggunakan teknologi untuk terus memperbaharui pengetahuan pedadogis dan konten mata pelajaran IPA yang saya ampu. |
| 3 | *Ethics* | 23 | Saya dapat menjadi teladan/ panutan bagi siswa untuk menerapkan kode etik penggunaan teknologi dalam pembelajaran IPA. |
| 24 | Saya dapat berperilaku etis dalam memperoleh dan menggunakan informasi yang akan digunakan dalam pembelajaran IPA melalui berbagai perangkat teknologi. |
| 3 | *Ethics* | 25 | Saya dapat menggunakan teknologi di setiap proses pembelajaran IPA dengan mempertimbangkan hak cipta. |
| 4 | *Proviency* | 26 | Saya dapat mengikuti kode etik profesi pendidik dalam pembelajaran IPA secara online. |
| 27 | Saya dapat berperilaku etis dalam menggunakan teknologi yang sesuai pada lingkungan pendidikan. |
| 28 | Saya dapat membimbing siswa untuk mengarahkan mereka mencari sumber digital yang valid dan terpercaya. |
| 29 | Saya dapat memecahkan masalah yang dihadapi dengan menggunakan lingkungan belajar secara *online* (*web CT, moodle*, dan sebagainya). |
| 30 | Saya dapat memecahkan masalah yag terjadi saat menggunakan teknologi pada proses pembelajaran IPA. |
| 31 | Saya dapat menggunakan teknologi untuk menemukan solusi masalah dalam menghubungkan materi IPA dengan kehidupan nyata. |
| 32 | Saya dapat menjadi pelopor dalam menggerakkan penggunaan inovasi teknologi pada komunitas pendidik di sekitar saya. |
| 33 | Saya dapat mengintegrasikan disiplin ilmu lain yang terkait penggunaan teknologi untuk memecahkan masalah dalam proses penyajian materi pembelajaran IPA. |

Sumber: Yurdakul (2013:967)

**Lampiran Jawaban Angket PCK**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No responden | PCK | | | | | | | | | | | | | jml | rata-rata |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1 | 5 | 4 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 49 | 3.77 |
| 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 53 | 4.08 |
| 3 | 4 | 5 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 5 | 5 | 4 | 58 | 4.46 |
| 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 5 | 54 | 4.15 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 61 | 4.69 |
| 6 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 54 | 4.15 |
| 7 | 4 | 5 | 3 | 3 | 3 | 3 | 4 | 3 | 5 | 2 | 2 | 3 | 4 | 44 | 3.38 |
| 8 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 56 | 4.31 |
| 9 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 5 | 53 | 4.08 |
| 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 65 | 5.00 |
| 11 | 4 | 5 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 5 | 4 | 5 | 4 | 58 | 4.46 |
| 12 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 57 | 4.38 |
| 13 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 63 | 4.85 |
| 14 | 4 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 60 | 4.62 |
| 15 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 5 | 4 | 57 | 4.38 |
| 16 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 4 | 5 | 59 | 4.54 |
| 17 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 4 | 5 | 63 | 4.85 |
| 18 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 54 | 4.15 |
| 19 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 5 | 4 | 4 | 3 | 3 | 4 | 47 | 3.62 |
| 20 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 5 | 4 | 5 | 5 | 4 | 53 | 4.08 |
| 21 | 4 | 5 | 4 | 3 | 3 | 3 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 54 | 4.15 |
| 22 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 62 | 4.77 |
| 23 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 53 | 4.08 |
| 24 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 55 | 4.23 |
| 25 | 5 | 5 | 5 | 2 | 2 | 3 | 2 | 1 | 2 | 1 | 2 | 2 | 4 | 36 | 2.77 |
| 26 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 52 | 4.00 |
| 27 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 65 | 5.00 |
| 28 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 62 | 4.77 |
| 29 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 5 | 60 | 4.62 |
| 30 | 3 | 4 | 4 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 39 | 3.00 |
| 31 | 4 | 5 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 59 | 4.54 |
| 32 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 63 | 4.85 |
| 33 | 4 | 5 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 49 | 3.77 |
| 34 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 60 | 4.62 |
| 35 | 4 | 5 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 51 | 3.92 |
| 36 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 2 | 3 | 3 | 4 | 3 | 3 | 41 | 3.15 |
| 37 | 4 | 5 | 5 | 3 | 4 | 4 | 3 | 4 | 5 | 5 | 4 | 5 | 3 | 54 | 4.15 |
| 38 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | 61 | 4.69 |
| 39 | 4 | 5 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 46 | 3.54 |
| 40 | 4 | 5 | 5 | 5 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | 60 | 4.62 |
| 41 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | 61 | 4.69 |
| 42 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 58 | 4.46 |
| 43 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 56 | 4.31 |
| 44 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 53 | 4.08 |
| 45 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 5 | 59 | 4.54 |
| 46 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 40 | 3.08 |
| 47 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 48 | 3.69 |
| 48 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 50 | 3.85 |
| 49 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 4 | 4 | 3 | 5 | 5 | 5 | 58 | 4.46 |
| 50 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 48 | 3.69 |
| 51 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 52 | 4.00 |
| 52 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 48 | 3.69 |
| 53 | 4 | 5 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 51 | 3.92 |
| 54 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 53 | 4.08 |
| 55 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 65 | 5.00 |
| 56 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 54 | 4.15 |
| 57 | 3 | 5 | 5 | 3 | 3 | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 48 | 3.69 |
| 58 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 32 | 2.46 |
| 59 | 4 | 5 | 5 | 5 | 4 | 5 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 58 | 4.46 |
| 60 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 42 | 3.23 |
| 61 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 55 | 4.23 |
| 62 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 56 | 4.31 |
| 63 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 48 | 3.69 |
| 64 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 64 | 4.92 |
| 65 | 4 | 5 | 4 | 5 | 5 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 54 | 4.15 |
| 66 | 5 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | 4 | 5 | 4 | 60 | 4.62 |
| 67 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 52 | 4.00 |
| 68 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 52 | 4.00 |
| 69 | 4 | 5 | 4 | 3 | 3 | 3 | 4 | 5 | 4 | 4 | 4 | 3 | 4 | 50 | 3.85 |
| 70 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 50 | 3.85 |
| 71 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 4 | 52 | 4.00 |
| 72 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 52 | 4.00 |
| 73 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 50 | 3.85 |
| 74 | 3 | 5 | 3 | 4 | 4 | 3 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 52 | 4.00 |
| 75 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 5 | 5 | 60 | 4.62 |
| 76 | 3 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 2 | 3 | 3 | 43 | 3.31 |
| 77 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 4 | 60 | 4.62 |
| 78 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 46 | 3.54 |
| 79 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 58 | 4.46 |
| 80 | 4 | 5 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 52 | 4.00 |
| 81 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 61 | 4.69 |
| 82 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 46 | 3.54 |
| 83 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 52 | 4.00 |
| 84 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 4 | 60 | 4.62 |
| 85 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 5 | 5 | 60 | 4.62 |
| 86 | 4 | 5 | 5 | 4 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 61 | 4.69 |
| 87 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 55 | 4.23 |
| 88 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 4 | 3 | 3 | 47 | 3.62 |
| 89 | 3 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 52 | 4.00 |
| 90 | 4 | 5 | 5 | 4 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 60 | 4.62 |
| 91 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 59 | 4.54 |
| 92 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 54 | 4.15 |
| 93 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 35 | 2.69 |
| jml | 381 | 427 | 411 | 369 | 375 | 369 | 385 | 373 | 394 | 375 | 381 | 375 | 387 |  |  |
| rata-rata | 4.1 | 4.6 | 4.4 | 4 | 4 | 4 | 4.1 | 4 | 4.2 | 4 | 4.1 | 4 | 4.2 |  | 4.14 |

**Lampiran Jawaban Angket TCK**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No responden | TCK | | | | | | | jml | rata-rata |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 2 | 5 | 4 | 3 | 3 | 3 | 22 | 3.14 |
| 2 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 32 | 4.57 |
| 3 | 4 | 3 | 4 | 4 | 5 | 4 | 4 | 28 | 4.00 |
| 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 35 | 5.00 |
| 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 34 | 4.86 |
| 6 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 29 | 4.14 |
| 7 | 3 | 3 | 4 | 3 | 2 | 3 | 3 | 21 | 3.00 |
| 8 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 29 | 4.14 |
| 9 | 3 | 3 | 5 | 5 | 3 | 3 | 3 | 25 | 3.57 |
| 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 35 | 5.00 |
| 11 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 30 | 4.29 |
| 12 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 28 | 4.00 |
| 13 | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 33 | 4.71 |
| 14 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 29 | 4.14 |
| 15 | 4 | 5 | 3 | 4 | 4 | 4 | 4 | 28 | 4.00 |
| 16 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 28 | 4.00 |
| 17 | 5 | 4 | 5 | 4 | 5 | 5 | 4 | 32 | 4.57 |
| 18 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 28 | 4.00 |
| 19 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 23 | 3.29 |
| 20 | 3 | 4 | 5 | 5 | 5 | 5 | 4 | 31 | 4.43 |
| 21 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 28 | 4.00 |
| 22 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 35 | 5.00 |
| 23 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 27 | 3.86 |
| 24 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 29 | 4.14 |
| 25 | 3 | 2 | 4 | 4 | 4 | 1 | 1 | 19 | 2.71 |
| 26 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 28 | 4.00 |
| 27 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 35 | 5.00 |
| 28 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 32 | 4.57 |
| 29 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 35 | 5.00 |
| 30 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 30 | 4.29 |
| 31 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 30 | 4.29 |
| 32 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 33 | 4.71 |
| 33 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 24 | 3.43 |
| 34 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 31 | 4.43 |
| 35 | 4 | 3 | 5 | 4 | 4 | 4 | 4 | 28 | 4.00 |
| 36 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 27 | 3.86 |
| 37 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 26 | 3.71 |
| 38 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 30 | 4.29 |
| 39 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 22 | 3.14 |
| 40 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 35 | 5.00 |
| 41 | 3 | 4 | 5 | 4 | 3 | 4 | 5 | 28 | 4.00 |
| 42 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 30 | 4.29 |
| 43 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 34 | 4.86 |
| 44 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 28 | 4.00 |
| 45 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 34 | 4.86 |
| 46 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 24 | 3.43 |
| 47 | 2 | 3 | 4 | 2 | 3 | 2 | 2 | 18 | 2.57 |
| 48 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 25 | 3.57 |
| 49 | 5 | 4 | 4 | 5 | 5 | 5 | 4 | 32 | 4.57 |
| 50 | 3 | 4 | 5 | 5 | 4 | 4 | 3 | 28 | 4.00 |
| 51 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 29 | 4.14 |
| 52 | 1 | 4 | 4 | 4 | 3 | 2 | 2 | 20 | 2.86 |
| 53 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 29 | 4.14 |
| 54 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 28 | 4.00 |
| 55 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 35 | 5.00 |
| 56 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 33 | 4.71 |
| 57 | 3 | 2 | 3 | 4 | 4 | 3 | 3 | 22 | 3.14 |
| 58 | 3 | 3 | 3 | 3 | 4 | 2 | 3 | 21 | 3.00 |
| 59 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 32 | 4.57 |
| 60 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 21 | 3.00 |
| 61 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 29 | 4.14 |
| 62 | 3 | 4 | 5 | 5 | 5 | 4 | 4 | 30 | 4.29 |
| 63 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 25 | 3.57 |
| 64 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 34 | 4.86 |
| 65 | 5 | 5 | 5 | 4 | 3 | 3 | 3 | 28 | 4.00 |
| 66 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 32 | 4.57 |
| 67 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 28 | 4.00 |
| 68 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 28 | 4.00 |
| 69 | 4 | 4 | 5 | 4 | 4 | 2 | 4 | 27 | 3.86 |
| 70 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 26 | 3.71 |
| 71 | 3 | 5 | 5 | 4 | 4 | 3 | 4 | 28 | 4.00 |
| 72 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 28 | 4.00 |
| 73 | 3 | 3 | 5 | 5 | 4 | 3 | 4 | 27 | 3.86 |
| 74 | 3 | 4 | 4 | 4 | 3 | 3 | 4 | 25 | 3.57 |
| 75 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 35 | 5.00 |
| 76 | 4 | 5 | 5 | 4 | 4 | 4 | 3 | 29 | 4.14 |
| 77 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 35 | 5.00 |
| 78 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 35 | 5.00 |
| 79 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 32 | 4.57 |
| 80 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 33 | 4.71 |
| 81 | 4 | 5 | 4 | 4 | 4 | 3 | 5 | 29 | 4.14 |
| 82 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 25 | 3.57 |
| 83 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 28 | 4.00 |
| 84 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 35 | 5.00 |
| 85 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 35 | 5.00 |
| 86 | 4 | 5 | 4 | 5 | 4 | 4 | 4 | 30 | 4.29 |
| 87 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 28 | 4.00 |
| 88 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 20 | 2.86 |
| 89 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 27 | 3.86 |
| 90 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 32 | 4.57 |
| 91 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 29 | 4.14 |
| 92 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 26 | 3.71 |
| 93 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 25 | 3.57 |
| jml | 367 | 383 | 407 | 402 | 386 | 362 | 371 |  |  |
| rata-rata | 3.95 | 4.12 | 4.38 | 4.32 | 4.15 | 3.89 | 3.99 |  | 4.11 |

**Lampiran Jawaban Angket TPK**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No responden | TPK | | | | | | | | | | | | | | | jml | rata-rata |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 3 | 4 | 3 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 56 | 3.73 |
| 2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 | 5.00 |
| 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 52 | 3.47 |
| 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 | 5.00 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 | 5.00 |
| 6 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 61 | 4.07 |
| 7 | 2 | 3 | 2 | 3 | 3 | 3 | 4 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 40 | 2.67 |
| 8 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 64 | 4.27 |
| 9 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 62 | 4.13 |
| 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 | 5.00 |
| 11 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 60 | 4.00 |
| 12 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 | 4.00 |
| 13 | 3 | 5 | 4 | 5 | 5 | 4 | 5 | 4 | 3 | 3 | 3 | 4 | 5 | 4 | 5 | 62 | 4.13 |
| 14 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 62 | 4.13 |
| 15 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 70 | 4.67 |
| 16 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 58 | 3.87 |
| 17 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 61 | 4.07 |
| 18 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 | 4.00 |
| 19 | 3 | 4 | 4 | 3 | 4 | 5 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 55 | 3.67 |
| 20 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 66 | 4.40 |
| 21 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 67 | 4.47 |
| 22 | 5 | 5 | 3 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 70 | 4.67 |
| 23 | 4 | 4 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 66 | 4.40 |
| 24 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 54 | 3.60 |
| 25 | 1 | 2 | 1 | 2 | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 28 | 1.87 |
| 26 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 | 4.00 |
| 27 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 3 | 5 | 5 | 71 | 4.73 |
| 28 | 4 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 73 | 4.87 |
| 29 | 4 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 4 | 5 | 5 | 4 | 5 | 68 | 4.53 |
| 30 | 4 | 4 | 2 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 53 | 3.53 |
| 31 | 4 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 4 | 4 | 69 | 4.60 |
| 32 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 | 5.00 |
| 33 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 54 | 3.60 |
| 34 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 3 | 66 | 4.40 |
| 35 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 58 | 3.87 |
| 36 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 55 | 3.67 |
| 37 | 5 | 3 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 52 | 3.47 |
| 38 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 | 4.00 |
| 39 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 45 | 3.00 |
| 40 | 5 | 5 | 5 | 4 | 5 | 4 | 5 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 63 | 4.20 |
| 41 | 2 | 3 | 4 | 5 | 3 | 5 | 5 | 5 | 5 | 4 | 3 | 4 | 3 | 3 | 4 | 58 | 3.87 |
| 42 | 4 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 5 | 4 | 65 | 4.33 |
| 43 | 5 | 4 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 72 | 4.80 |
| 44 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 59 | 3.93 |
| 45 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 72 | 4.80 |
| 46 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 47 | 3.13 |
| 47 | 2 | 3 | 2 | 4 | 3 | 2 | 3 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 39 | 2.60 |
| 48 | 4 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 56 | 3.73 |
| 49 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 61 | 4.07 |
| 50 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 56 | 3.73 |
| 51 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 | 4.00 |
| 52 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 41 | 2.73 |
| 53 | 3 | 4 | 4 | 4 | 4 | 3 | 5 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 56 | 3.73 |
| 54 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 61 | 4.07 |
| 55 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 | 5.00 |
| 56 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 | 4.00 |
| 57 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 48 | 3.20 |
| 58 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 51 | 3.40 |
| 59 | 5 | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 73 | 4.87 |
| 60 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 45 | 3.00 |
| 61 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 55 | 3.67 |
| 62 | 4 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 4 | 5 | 5 | 4 | 5 | 68 | 4.53 |
| 63 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 51 | 3.40 |
| 64 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 62 | 4.13 |
| 65 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 56 | 3.73 |
| 66 | 4 | 4 | 5 | 4 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 4 | 5 | 3 | 65 | 4.33 |
| 67 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 | 4.00 |
| 68 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 59 | 3.93 |
| 69 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 61 | 4.07 |
| 70 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 55 | 3.67 |
| 71 | 4 | 4 | 4 | 5 | 3 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 63 | 4.20 |
| 72 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 | 4.00 |
| 73 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 62 | 4.13 |
| 74 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 4 | 53 | 3.53 |
| 75 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 | 5.00 |
| 76 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 62 | 4.13 |
| 77 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 71 | 4.73 |
| 78 | 4 | 5 | 4 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 72 | 4.80 |
| 79 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 | 4.00 |
| 80 | 4 | 3 | 2 | 3 | 4 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 44 | 2.93 |
| 81 | 3 | 4 | 5 | 4 | 4 | 3 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 59 | 3.93 |
| 82 | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 55 | 3.67 |
| 83 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 56 | 3.73 |
| 84 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 71 | 4.73 |
| 85 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 | 5.00 |
| 86 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 61 | 4.07 |
| 87 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 61 | 4.07 |
| 88 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 47 | 3.13 |
| 89 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 | 4.00 |
| 90 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 4 | 70 | 4.67 |
| 91 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 68 | 4.53 |
| 92 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 58 | 3.87 |
| 93 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 3 | 3 | 52 | 3.47 |
| jml | 364 | 374 | 362 | 383 | 382 | 385 | 396 | 395 | 381 | 371 | 371 | 379 | 359 | 357 | 359 |  |  |
| rata-rata | 3.91 | 4.02 | 3.89 | 4.12 | 4.11 | 4.14 | 4.26 | 4.25 | 4.10 | 3.99 | 3.99 | 4.08 | 3.86 | 3.84 | 3.86 |  | 4.03 |

**Lampiran Jawaban Angket TPACK**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No responden | TPACK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | jml | rata-rata |
| faktor design | | | | | | | | Faktor exertion | | | | | | | | | | | | Faktor ethics | | | | | faktor profiency | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 1 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 3 | 4 | 3 | 3 | 4 | 114 | 3.68 |
| 2 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 136 | 4.39 |
| 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 113 | 3.65 |
| 4 | 4 | 4 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 5 | 3 | 4 | 135 | 4.35 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 155 | 5.00 |
| 6 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 128 | 4.13 |
| 7 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 3 | 4 | 3 | 2 | 3 | 4 | 4 | 3 | 2 | 3 | 5 | 5 | 5 | 5 | 3 | 3 | 2 | 3 | 2 | 2 | 94 | 3.03 |
| 8 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 133 | 4.29 |
| 9 | 5 | 5 | 3 | 3 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 5 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 116 | 3.74 |
| 10 | 3 | 4 | 5 | 5 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 134 | 4.32 |
| 11 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 144 | 4.65 |
| 12 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 124 | 4.00 |
| 13 | 5 | 4 | 5 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 3 | 5 | 3 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 3 | 3 | 3 | 4 | 4 | 4 | 131 | 4.23 |
| 14 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 124 | 4.00 |
| 15 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 141 | 4.55 |
| 16 | 4 | 5 | 5 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 5 | 4 | 3 | 5 | 5 | 5 | 5 | 3 | 4 | 3 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 3 | 4 | 127 | 4.10 |
| 17 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 5 | 3 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 96 | 3.10 |
| 18 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 123 | 3.97 |
| 19 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 107 | 3.45 |
| 20 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 2 | 4 | 2 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 4 | 3 | 3 | 3 | 5 | 4 | 5 | 5 | 5 | 5 | 127 | 4.10 |
| 21 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 130 | 4.19 |
| 22 | 5 | 4 | 5 | 3 | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 4 | 5 | 5 | 3 | 5 | 4 | 5 | 5 | 3 | 2 | 5 | 3 | 4 | 5 | 5 | 3 | 2 | 2 | 1 | 5 | 120 | 3.87 |
| 23 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 5 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 134 | 4.32 |
| 24 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 113 | 3.65 |
| 25 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 1 | 2 | 2 | 2 | 2 | 4 | 2 | 2 | 2 | 2 | 2 | 65 | 2.10 |
| 26 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 124 | 4.00 |
| 27 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 4 | 5 | 5 | 147 | 4.74 |
| 28 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 154 | 4.97 |
| 29 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 3 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 138 | 4.45 |
| 30 | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 2 | 5 | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 5 | 3 | 3 | 4 | 3 | 4 | 112 | 3.61 |
| 31 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 4 | 134 | 4.32 |
| 32 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 4 | 142 | 4.58 |
| 33 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 123 | 3.97 |
| 34 | 2 | 2 | 4 | 4 | 4 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 119 | 3.84 |
| 35 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 4 | 5 | 5 | 4 | 3 | 4 | 3 | 3 | 4 | 115 | 3.71 |
| 36 | 3 | 4 | 4 | 4 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 2 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 99 | 3.19 |
| 37 | 5 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 5 | 5 | 4 | 5 | 5 | 3 | 3 | 3 | 3 | 2 | 5 | 108 | 3.48 |
| 38 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 119 | 3.84 |
| 39 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 92 | 2.97 |
| 40 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 126 | 4.06 |
| 41 | 5 | 5 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 2 | 4 | 123 | 3.97 |
| 42 | 3 | 3 | 3 | 4 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 107 | 3.45 |
| 43 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 145 | 4.68 |
| 44 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 122 | 3.94 |
| 45 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 1 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 3 | 3 | 123 | 3.97 |
| 46 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 93 | 3.00 |
| 47 | 2 | 3 | 3 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 83 | 2.68 |
| 48 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 113 | 3.65 |
| 49 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 144 | 4.65 |
| 50 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 2 | 3 | 117 | 3.77 |
| 51 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 124 | 4.00 |
| 52 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 3 | 97 | 3.13 |
| 53 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 5 | 3 | 3 | 4 | 116 | 3.74 |
| 54 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 124 | 4.00 |
| 55 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 154 | 4.97 |
| 56 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 125 | 4.03 |
| 57 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 4 | 4 | 2 | 2 | 5 | 4 | 3 | 2 | 2 | 3 | 3 | 2 | 5 | 4 | 4 | 4 | 4 | 5 | 3 | 4 | 3 | 1 | 3 | 101 | 3.26 |
| 58 | 4 | 4 | 3 | 4 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 2 | 3 | 3 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 104 | 3.35 |
| 59 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 152 | 4.90 |
| 60 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 93 | 3.00 |
| 61 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 119 | 3.84 |
| 62 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 114 | 3.68 |
| 63 | 3 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 111 | 3.58 |
| 64 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 127 | 4.10 |
| 65 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 2 | 4 | 104 | 3.35 |
| 66 | 5 | 5 | 4 | 4 | 4 | 3 | 4 | 3 | 5 | 4 | 4 | 5 | 5 | 5 | 4 | 5 | 4 | 4 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 130 | 4.19 |
| 67 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 114 | 3.68 |
| 68 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 4 | 119 | 3.84 |
| 69 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 2 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 114 | 3.68 |
| 70 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 114 | 3.68 |
| 71 | 4 | 5 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 131 | 4.23 |
| 72 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 124 | 4.00 |
| 73 | 4 | 4 | 4 | 4 | 4 | 3 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 5 | 3 | 4 | 127 | 4.10 |
| 74 | 5 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 5 | 5 | 5 | 3 | 3 | 3 | 4 | 3 | 116 | 3.74 |
| 75 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 3 | 2 | 2 | 2 | 3 | 2 | 4 | 4 | 3 | 3 | 2 | 3 | 120 | 3.87 |
| 76 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 119 | 3.84 |
| 77 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 152 | 4.90 |
| 78 | 4 | 5 | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 2 | 3 | 3 | 2 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 125 | 4.03 |
| 79 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 123 | 3.97 |
| 80 | 4 | 5 | 3 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 3 | 4 | 4 | 2 | 3 | 3 | 2 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 118 | 3.81 |
| 81 | 4 | 4 | 5 | 5 | 5 | 3 | 4 | 2 | 5 | 4 | 5 | 4 | 3 | 4 | 4 | 5 | 3 | 4 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 3 | 4 | 3 | 4 | 128 | 4.13 |
| 82 | 3 | 4 | 3 | 4 | 4 | 2 | 3 | 2 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 109 | 3.52 |
| 83 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 116 | 3.74 |
| 84 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 152 | 4.90 |
| 85 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 3 | 2 | 2 | 2 | 3 | 2 | 4 | 4 | 3 | 3 | 2 | 3 | 120 | 3.87 |
| 86 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 5 | 5 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 4 | 119 | 3.84 |
| 87 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 4 | 5 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 111 | 3.58 |
| 88 | 3 | 3 | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 5 | 5 | 3 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 118 | 3.81 |
| 89 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 124 | 4.00 |
| 90 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 5 | 4 | 5 | 4 | 5 | 5 | 5 | 3 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 3 | 5 | 141 | 4.55 |
| 91 | 5 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 5 | 5 | 4 | 2 | 3 | 3 | 4 | 3 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 123 | 3.97 |
| 92 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | 5 | 4 | 4 | 3 | 5 | 4 | 3 | 127 | 4.10 |
| 93 | 4 | 4 | 3 | 3 | 3 | 2 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 1 | 2 | 98 | 3.16 |
| jml | 370 | 381 | 369 | 374 | 352 | 335 | 358 | 339 | 360 | 357 | 353 | 369 | 393 | 376 | 357 | 337 | 367 | 360 | 357 | 349 | 381 | 384 | 376 | 398 | 399 | 381 | 357 | 362 | 361 | 322 | 349 |  |  |
| rata-rata | 3,98 | 4,10 | 3,97 | 4,02 | 3,78 | 3,60 | 3,85 | 3,65 | 3,87 | 3,84 | 3,80 | 3,97 | 4,23 | 4,04 | 3,84 | 3,62 | 3,95 | 3,87 | 3,84 | 3,75 | 4,10 | 4,13 | 4,04 | 4,28 | 4,29 | 4,10 | 3,84 | 3,89 | 3,88 | 3,46 | 3,75 |  | 3.91 |

**Lampiran Uji Regresi *PCK* terhadap *TPACK***

| **Variables Entered/Removedb** | | | | |
| --- | --- | --- | --- | --- |
| Model | | Variables Entered | Variables Removed | Method |
| dimension0 | 1 | PCKa | . | Enter |
| a. All requested variables entered. | | | | |
| b. Dependent Variable: TPACK | | | | |

| **Model Summaryb** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin- Watson |
| dimension0 | 1 | .663a | .440 | .434 | 12.265 | 1.791 |
| a. Predictors: (Constant), PCK | | | | | | |
| b. Dependent Variable: TPACK | | | | | | |

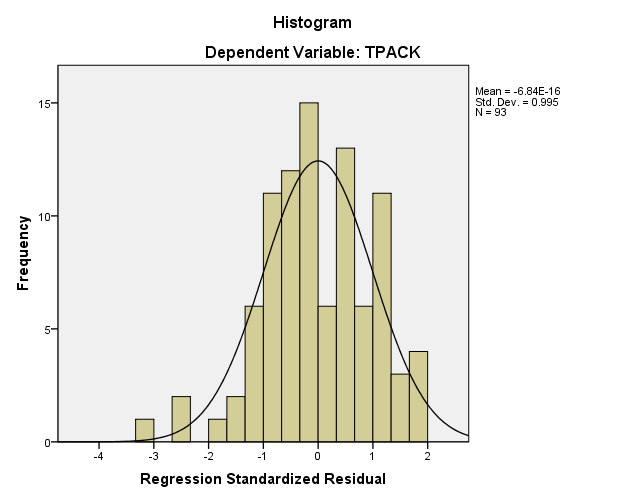
| **ANOVAb** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 10744.112 | 1 | 10744.112 | 71.417 | .000a |
| Residual | 13690.211 | 91 | 150.442 |  |  |
| Total | 24434.323 | 92 |  |  |  |
| a. Predictors: (Constant), PCK | | | | | | |
| b. Dependent Variable: TPACK | | | | | | |

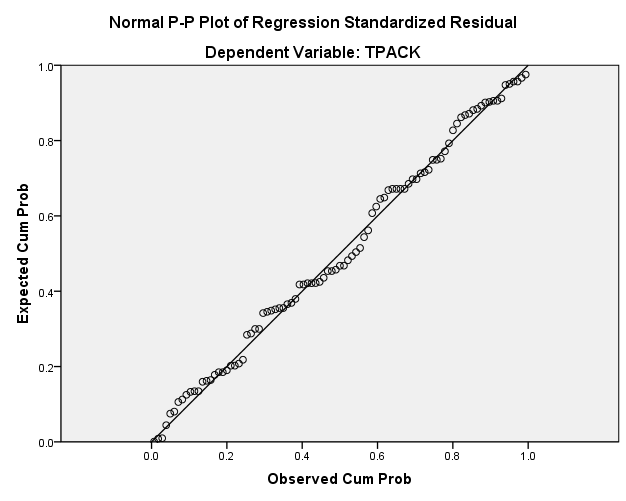
| **Coefficientsa** | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
| B | Std. Error | Beta | Tolerance | VIF |
| 1 | (Constant) | 37.615 | 9.987 |  | 3.767 | .000 |  |  |
| PCK | 1.556 | .184 | .663 | 8.451 | .000 | 1.000 | 1.000 |
| a. Dependent Variable: TPACK | | | | | | | | |

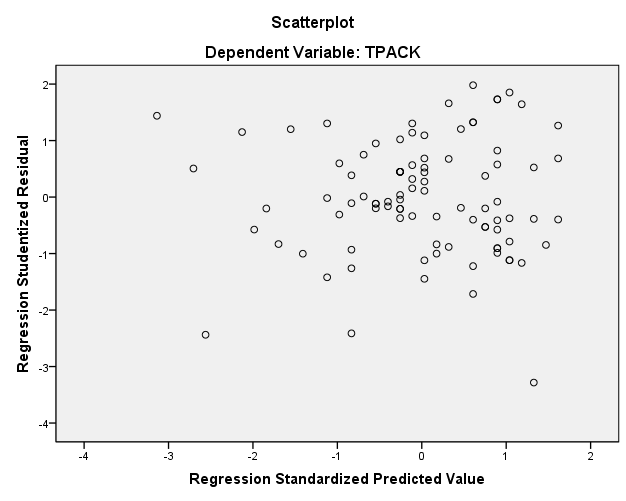
| **Collinearity Diagnosticsa** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Model | | Dimension | | Eigenvalue | Condition Index | Variance Proportions | |
| (Constant) | PCK |
| dimension0 | 1 | dimension1 | 1 | 1.992 | 1.000 | .00 | .00 |
| 2 | .008 | 15.640 | 1.00 | 1.00 |
| a. Dependent Variable: TPACK | | | | | | | |

| **Residuals Statisticsa** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  | Minimum | Maximum | Mean | Std. Deviation | N |
| Predicted Value | 87.42 | 138.78 | 121.32 | 10.807 | 93 |
| Std. Predicted Value | -3.137 | 1.615 | .000 | 1.000 | 93 |
| Standard Error of Predicted Value | 1.272 | 4.209 | 1.714 | .548 | 93 |
| Adjusted Predicted Value | 85.20 | 138.97 | 121.33 | 10.845 | 93 |
| Residual | -39.664 | 24.117 | .000 | 12.199 | 93 |
| Std. Residual | -3.234 | 1.966 | .000 | .995 | 93 |
| Stud. Residual | -3.283 | 1.981 | .000 | 1.008 | 93 |
| Deleted Residual | -40.887 | 24.479 | -.004 | 12.543 | 93 |
| Stud. Deleted Residual | -3.478 | 2.014 | -.002 | 1.022 | 93 |
| Mahal. Distance | .001 | 9.843 | .989 | 1.584 | 93 |
| Cook's Distance | .000 | .266 | .014 | .035 | 93 |
| Centered Leverage Value | .000 | .107 | .011 | .017 | 93 |
| a. Dependent Variable: TPACK | | | | | |

**Charts**







**Lampiran Uji Regresi *TCK* terhadap *TPACK***

| **Variables Entered/Removedb** | | | | |
| --- | --- | --- | --- | --- |
| Model | | Variables Entered | Variables Removed | Method |
| dimension0 | 1 | TCKa | . | Enter |
| a. All requested variables entered. | | | | |
| b. Dependent Variable: TPACK | | | | |

| **Model Summaryb** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin- Watson |
| dimension0 | 1 | .714a | .510 | .504 | 11.473 | 2.010 |
| a. Predictors: (Constant), TCK | | | | | | |
| b. Dependent Variable: TPACK | | | | | | |

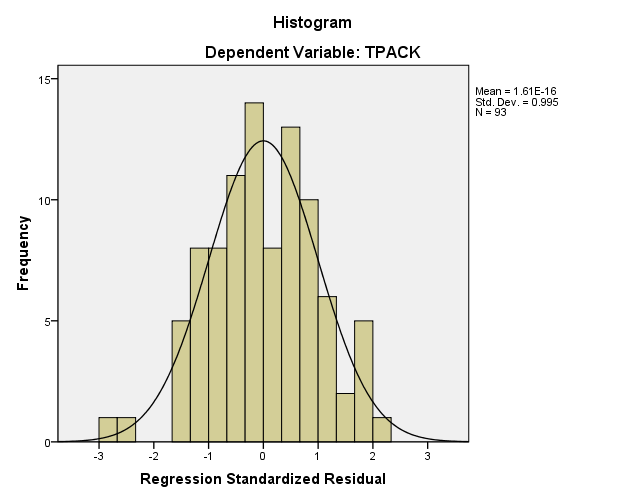
| **ANOVAb** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 12455.258 | 1 | 12455.258 | 94.617 | .000a |
| Residual | 11979.065 | 91 | 131.638 |  |  |
| Total | 24434.323 | 92 |  |  |  |
| a. Predictors: (Constant), TCK | | | | | | |
| b. Dependent Variable: TPACK | | | | | | |

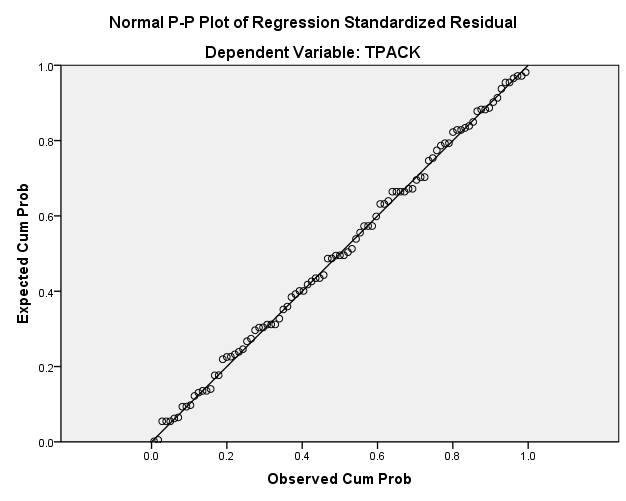
| **Coefficientsa** | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
| B | Std. Error | Beta | Tolerance | VIF |
| 1 | (Constant) | 42.186 | 8.222 |  | 5.131 | .000 |  |  |
| TCK | 2.748 | .283 | .714 | 9.727 | .000 | 1.000 | 1.000 |
| a. Dependent Variable: TPACK | | | | | | | | |

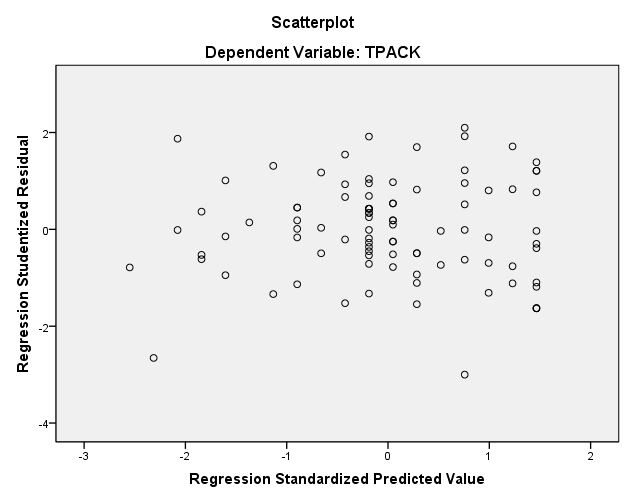
| **Collinearity Diagnosticsa** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Model | | Dimension | | Eigenvalue | Condition Index | Variance Proportions | |
| (Constant) | TCK |
| dimension0 | 1 | dimension1 | 1 | 1.989 | 1.000 | .01 | .01 |
| 2 | .011 | 13.749 | .99 | .99 |
| a. Dependent Variable: TPACK | | | | | | | |

| **Residuals Statisticsa** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  | Minimum | Maximum | Mean | Std. Deviation | N |
| Predicted Value | 91.65 | 138.37 | 121.32 | 11.635 | 93 |
| Std. Predicted Value | -2.550 | 1.465 | .000 | 1.000 | 93 |
| Standard Error of Predicted Value | 1.191 | 3.274 | 1.613 | .481 | 93 |
| Adjusted Predicted Value | 92.42 | 139.02 | 121.35 | 11.606 | 93 |
| Residual | -34.129 | 23.871 | .000 | 11.411 | 93 |
| Std. Residual | -2.975 | 2.081 | .000 | .995 | 93 |
| Stud. Residual | -3.000 | 2.098 | -.001 | 1.008 | 93 |
| Deleted Residual | -34.718 | 24.284 | -.027 | 11.717 | 93 |
| Stud. Deleted Residual | -3.143 | 2.139 | -.003 | 1.020 | 93 |
| Mahal. Distance | .002 | 6.502 | .989 | 1.295 | 93 |
| Cook's Distance | .000 | .261 | .014 | .031 | 93 |
| Centered Leverage Value | .000 | .071 | .011 | .014 | 93 |
| a. Dependent Variable: TPACK | | | | | |

**Charts**







**Lampiran Uji Regresi *TPK* terhadap *TPACK***

| **Variables Entered/Removedb** | | | | |
| --- | --- | --- | --- | --- |
| Model | | Variables Entered | Variables Removed | Method |
| dimension0 | 1 | TPKa | . | Enter |
| a. All requested variables entered. | | | | |
| b. Dependent Variable: TPACK | | | | |

| **Model Summaryb** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| dimension0 | 1 | .807a | .651 | .647 | 9.683 | 2.257 |
| a. Predictors: (Constant), TPK | | | | | | |
| b. Dependent Variable: TPACK | | | | | | |

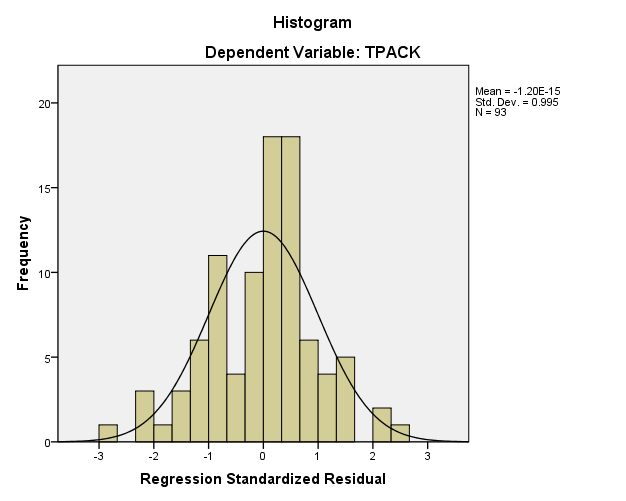
| **ANOVAb** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 15901.366 | 1 | 15901.366 | 169.581 | .000a |
| Residual | 8532.957 | 91 | 93.769 |  |  |
| Total | 24434.323 | 92 |  |  |  |
| a. Predictors: (Constant), TPK | | | | | | |
| b. Dependent Variable: TPACK | | | | | | |

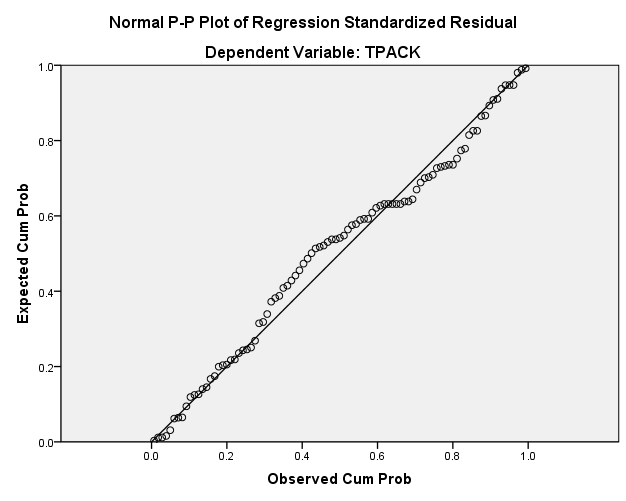
| **Coefficientsa** | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
| B | Std. Error | Beta | Tolerance | VIF |
| 1 | (Constant) | 35.837 | 6.641 |  | 5.396 | .000 |  |  |
| TPK | 1.415 | .109 | .807 | 13.022 | .000 | 1.000 | 1.000 |
| a. Dependent Variable: TPACK | | | | | | | | |

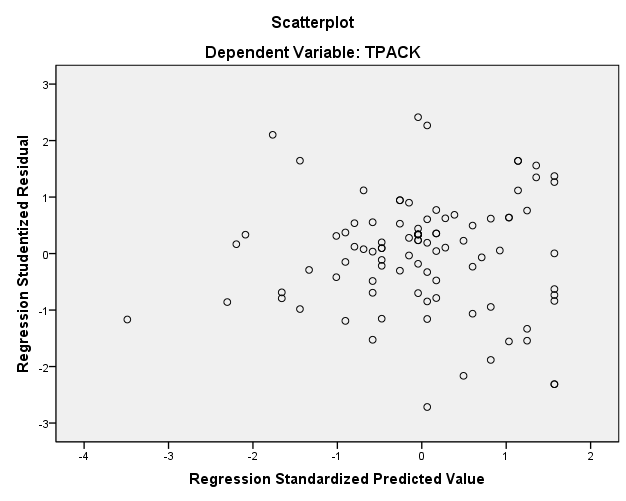
| **Collinearity Diagnosticsa** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Model | | Dimension | | Eigenvalue | Condition Index | Variance Proportions | |
| (Constant) | TPK |
| dimension0 | 1 | dimension1 | 1 | 1.989 | 1.000 | .01 | .01 |
| 2 | .011 | 13.151 | .99 | .99 |
| a. Dependent Variable: TPACK | | | | | | | |

| **Residuals Statisticsa** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  | Minimum | Maximum | Mean | Std. Deviation | N |
| Predicted Value | 75.46 | 141.97 | 121.32 | 13.147 | 93 |
| Std. Predicted Value | -3.488 | 1.571 | .000 | 1.000 | 93 |
| Standard Error of Predicted Value | 1.005 | 3.662 | 1.350 | .441 | 93 |
| Adjusted Predicted Value | 77.21 | 142.83 | 121.35 | 13.098 | 93 |
| Residual | -26.159 | 23.256 | .000 | 9.631 | 93 |
| Std. Residual | -2.701 | 2.402 | .000 | .995 | 93 |
| Stud. Residual | -2.716 | 2.415 | -.001 | 1.007 | 93 |
| Deleted Residual | -26.445 | 23.509 | -.023 | 9.878 | 93 |
| Stud. Deleted Residual | -2.818 | 2.482 | -.002 | 1.020 | 93 |
| Mahal. Distance | .002 | 12.169 | .989 | 1.631 | 93 |
| Cook's Distance | .000 | .114 | .013 | .023 | 93 |
| Centered Leverage Value | .000 | .132 | .011 | .018 | 93 |
| a. Dependent Variable: TPACK | | | | | |

**Charts**







**Lampiran Uji Regresi Faktor Jenis Kelamin, Usia dan Lama Bekerjaterhadap *TPACK***

| **Variables Entered/Removedb** | | | | |
| --- | --- | --- | --- | --- |
| Model | | Variables Entered | Variables Removed | Method |
| dimension0 | 1 | Masa\_kerja, Jenis\_Kelamin, Usiaa | . | Enter |
| a. All requested variables entered. | | | | |
| b. Dependent Variable: TPACK | | | | |

| **Model Summaryb** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| dimension0 | 1 | .311a | .097 | .066 | 15.750 | 1.798 |
| a. Predictors: (Constant), Masa\_kerja, Jenis\_Kelamin, Usia | | | | | | |
| b. Dependent Variable: TPACK | | | | | | |

| **ANOVAb** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 2358.075 | 3 | 786.025 | 3.169 | .028a |
| Residual | 22076.248 | 89 | 248.048 |  |  |
| Total | 24434.323 | 92 |  |  |  |
| a. Predictors: (Constant), Masa\_kerja, Jenis\_Kelamin, Usia | | | | | | |
| b. Dependent Variable: TPACK | | | | | | |

| **Coefficientsa** | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
| B | Std. Error | Beta | Tolerance | VIF |
| 1 | (Constant) | 118.374 | 2.405 |  | 49.228 | .000 |  |  |
| Jenis\_Kelamin | 9.454 | 3.659 | .268 | 2.584 | .011 | .947 | 1.056 |
| Usia | -5.444 | 4.229 | -.151 | -1.287 | .201 | .741 | 1.350 |
| Masa\_kerja | 6.867 | 4.465 | .180 | 1.538 | .128 | .741 | 1.350 |
| a. Dependent Variable: TPACK | | | | | | | | |

| **Collinearity Diagnosticsa** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Model | | Dimension | | Eigenvalue | Condition Index | Variance Proportions | | | |
| (Constant) | Jenis\_Kelamin | Usia | Masa\_kerja |
| dimension0 | 1 | dimension1 | 1 | 2.273 | 1.000 | .07 | .04 | .07 | .07 |
| 2 | 1.045 | 1.475 | .03 | .38 | .08 | .10 |
| 3 | .374 | 2.464 | .02 | .03 | .60 | .81 |
| 4 | .307 | 2.720 | .88 | .55 | .26 | .02 |
| a. Dependent Variable: TPACK | | | | | | | | | |

| **Residuals Statisticsa** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  | Minimum | Maximum | Mean | Std. Deviation | N |
| Predicted Value | 112.93 | 134.69 | 121.32 | 5.063 | 93 |
| Std. Predicted Value | -1.658 | 2.641 | .000 | 1.000 | 93 |
| Standard Error of Predicted Value | 2.405 | 5.237 | 3.167 | .804 | 93 |
| Adjusted Predicted Value | 111.83 | 135.78 | 121.37 | 5.154 | 93 |
| Residual | -47.930 | 35.626 | .000 | 15.491 | 93 |
| Std. Residual | -3.043 | 2.262 | .000 | .984 | 93 |
| Stud. Residual | -3.152 | 2.289 | -.001 | 1.004 | 93 |
| Deleted Residual | -51.420 | 36.477 | -.043 | 16.146 | 93 |
| Stud. Deleted Residual | -3.325 | 2.346 | -.003 | 1.018 | 93 |
| Mahal. Distance | 1.155 | 9.182 | 2.968 | 2.079 | 93 |
| Cook's Distance | .000 | .181 | .011 | .021 | 93 |
| Centered Leverage Value | .013 | .100 | .032 | .023 | 93 |
| a. Dependent Variable: TPACK | | | | | |

**Charts**

