Table 1. Initial assessment exercises – Kappa Coefficients by group

|  |  |
| --- | --- |
| Group | Avg Kappa Co-efficient |
| 1 year or less experience as flight instructor (N=12) | 0.197 |
| 13 months to 2 years’ experience as flight instructor (N=19) | 0.325 |
| 2years experience or more as a flight instructor (N=13) | 0.357 |
| Full time flight faculty (N=9) | 0.340 |

Table 2. Initial assessment exercises – Frequency data 1yr or less experience – 1=low performance; 4 = high performance

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Group | Description | Gold Standard Grade | Respondents Mode Grade | Percentage of Agreement with Gold Standard |
| 1 year or less experience as flight instructor (N=12) | Lesson 27 – Slow Flight | 2 | 2 | 67% |
|  | Lesson 27 – Steep Turn Entry | 4 | 2 | 0% |
|  | Lesson 27 – Steep Turn Maintenance | 3 | 2 | 34% |
|  | Lesson 27 – Steep Turn Roll out | 3 | 2 | 17% |
|  | Lesson 27 – Power Off Stalls | 1 | 1 | 50% |
|  | Lesson 27 – Power On Stalls | 1 | 1 | 67% |
|  | Lesson 27 – Symptoms of Stalls | 1 | 1 | 42% |
|  | Lesson 27 – Overall Grade | E | C | 8% |
|  | Lesson 28 – Slow Flight | 4 | 2 | 0% |
|  | Lesson 28 – Steep Turns | 3 | 2 | 34% |
|  | Lesson 28 – Power Off Stall | 4 | 2 | 0% |
|  | Lesson 28 – Power On Stall | 4 | 2 | 0% |
|  | Lesson 28 – Overall Grade | E | C | 20% |
|  | Lesson 43 – Slow Flight | 2 | 3 | 42% |
|  | Lesson 43 – Steep Turns | 3 | 3 | 92% |
|  | Lesson 43 – Power Off Stall | 1 | 2 | 17% |
|  | Lesson 43 – Power On Stall | 3 | 3 | 67% |
|  | Lesson 43 – Overall Grade | E | C | 17% |
|  | Lesson 48 – Slow Flight | 4 | 3 | 0% |
|  | Lesson 48 – Steep Turns | 2 | 2 | 75% |
|  | Lesson 48 – Power Off Stall | 2 | 2 | 55% |
|  | Lesson 48 – Power On Stall | 3 | 3 | 90% |
|  | Lesson 48 – Overall Grade | E | B | 20% |

Table 3. Initial assessment exercises – Frequency data – 13 mths to 2yrs experience – 1=low performance; 4 = high performance

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Group | Description | Gold Standard Grade | Respondents Mode Grade | Percentage of Agreement with Gold Standard |
| 13 mths -2 yrs experience as flight instructor (N=19) | Lesson 27 – Slow Flight | 2 | 2 | 79% |
|  | Lesson 27 – Steep Turns Entry | 4 | 2 | 0% |
|  | Lesson 27 – Steep Turns Maintenance | 3 | 3 | 64% |
|  | Lesson 27 – Steep Turns Roll Out | 3 | 2 | 37% |
|  | Lesson 27 – Power Off Stalls | 1 | 1 | 69% |
|  | Lesson 27 - Power On Stalls | 1 | 1 | 56% |
|  | Lesson 27 – Symptoms of Stall | 1 | 1 | 50% |
|  | Lesson 27 – Overall Grade | E | E | 57% |
|  | Lesson 28 – Slow Flight | 4 | 2 | 0% |
|  | Lesson 28 – Steep Turns | 3 | 2 | 34% |
|  | Lesson 28 – Power Off Stalls | 4 | 2 | 0% |
|  | Lesson 28 – Power On Stalls | 4 | 2 | 0% |
|  | Lesson 28 – Overall Grade | E | E | 79% |
|  | Lesson 43 – Slow Flight | 2 | 2 and 3 | 50% |
|  | Lesson 43 – Steep Turns | 3 | 3 | 95% |
|  | Lesson 43 – Power Off Stalls | 1 | 2 | 23% |
|  | Lesson 43 – Power On Stalls | 3 | 2 and 3 | 50% |
|  | Lesson 43 – Overall Grade | E | E | 67% |
|  | Lesson 48 – Slow Flight | 4 | 3 | 6% |
|  | Lesson 48 – Steep Turns | 2 | 2 | 95% |
|  | Lesson 48 – Power Off Stalls | 2 | 2 | 56% |
|  | Lesson 48 – Power On Stalls | 3 | 3 | 82% |
|  | Lesson 48 – Overall Grade | E | E | 61% |

Table 4. Initial assessment exercises – Frequency data – 2 +yrs experience – 1=low performance; 4 = high performance

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Group | Description | Gold Standard Grade | Respondents Mode Grade | Percentage of Agreement with Gold Standard |
| 2 + yrs experience as flight instructor (N=13) | Lesson 27 – Slow Flight | 2 | 2 | 77% |
|  | Lesson 27 – Steep Turns Entry | 4 | 2 | 0% |
|  | Lesson 27 – Steep Turns Maintenance | 3 | 2 | 47% |
|  | Lesson 27 – Steep Turns Roll Out | 3 | 2 | 39% |
|  | Lesson 27 – Power Off Stalls | 1 | 1 | 70% |
|  | Lesson 27 - Power On Stalls | 1 | 1 | 62% |
|  | Lesson 27 – Symptoms of Stall | 1 | 1 | 62% |
|  | Lesson 27 – Overall Grade | E | E | 61% |
|  | Lesson 28 – Slow Flight | 4 | 2 | 0% |
|  | Lesson 28 – Steep Turns | 3 | 2 | 39% |
|  | Lesson 28 – Power Off Stalls | 4 | 2 | 0% |
|  | Lesson 28 – Power On Stalls | 4 | 2 | 0% |
|  | Lesson 28 – Overall Grade | E | E | 70% |
|  | Lesson 43 – Slow Flight | 2 | 2 | 62% |
|  | Lesson 43 – Steep Turns | 3 | 3 | 100% |
|  | Lesson 43 – Power Off Stalls | 1 | 2 | 54% |
|  | Lesson 43 – Power On Stalls | 3 | 3 | 54% |
|  | Lesson 43 – Overall Grade | E | E | 62% |
|  | Lesson 48 – Slow Flight | 4 | 3 | 0% |
|  | Lesson 48 – Steep Turns | 2 | 2 | 85% |
|  | Lesson 48 – Power Off Stalls | 2 | 2 | 85% |
|  | Lesson 48 – Power On Stalls | 3 | 3 | 77% |
|  | Lesson 48 – Overall Grade | E | E | 69% |

Table 5.Post-test and Initial assessment exercises – Kappa Coefficients by group

|  |  |  |
| --- | --- | --- |
| Group | Avg Kappa Co-efficient Initial Assessment | Avg. Kappa Co-efficient Post-test Assessment |
| 1 year or less experience as flight instructor (N=12) | 0.197 | .339 |
| 13 months to 2 years’ experience as flight instructor (N=19) | 0.325 | .270 |
| 2years experience or more as a flight instructor (N=13) | 0.357 | .344 |

Table 6. Post-test assessment exercises – Frequency data 1yr or less experience – 1=low performance; 4 = high performance

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Group | Description | Gold Standard Grade | Respondents Mode Grade | Percentage of Agreement with Gold Standard |
| 1 year or less experience as flight instructor (N=12) | Lesson 27 – Slow Flight | 2 | 2 | 92% |
|  | Lesson 27 – Steep Turn Entry | 4 | 2 | 8% |
|  | Lesson 27 – Steep Turn Maintenance | 3 | 3 | 69% |
|  | Lesson 27 – Steep Turn Roll out | 3 | 3 | 62% |
|  | Lesson 27 – Power Off Stalls | 1 | 1 | 69% |
|  | Lesson 27 – Power On Stalls | 1 | 1 | 62% |
|  | Lesson 27 – Symptoms of Stalls | 1 | 1 | 62% |
|  | Lesson 27 – Overall Grade | E | C | 46% |
|  | Lesson 28 – Slow Flight | 4 | 2 | 0% |
|  | Lesson 28 – Steep Turns | 3 | 3 | 54% |
|  | Lesson 28 – Power Off Stall | 4 | 2 | 0% |
|  | Lesson 28 – Power On Stall | 4 | 2 | 0% |
|  | Lesson 28 – Overall Grade | E | E | 54% |
|  | Lesson 43 – Slow Flight | 2 | 3 | 31% |
|  | Lesson 43 – Steep Turns | 3 | 3 | 85% |
|  | Lesson 43 – Power Off Stall | 1 | 2 | 23% |
|  | Lesson 43 – Power On Stall | 3 | 2 | 46% |
|  | Lesson 43 – Overall Grade | E | E | 50% |
|  | Lesson 48 – Slow Flight | 4 | 3 | 8% |
|  | Lesson 48 – Steep Turns | 2 | 2 | 92% |
|  | Lesson 48 – Power Off Stall | 2 | 2 | 62% |
|  | Lesson 48 – Power On Stall | 3 | 3 | 62% |
|  | Lesson 48 – Overall Grade | E | E | 50% |

Table 7. Post-Test assessment exercises – Frequency data 13 months to 2 years of experience – 1=low performance; 4 = high performance.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Group | Description | Gold Standard Grade | Respondents Mode Grade | Percentage of Agreement with Gold Standard |
| 13 mths -2 yrs experience as flight instructor (N=19) | Lesson 27 – Slow Flight | 2 | 2 | 67% |
|  | Lesson 27 – Steep Turns Entry | 4 | 3 | 0% |
|  | Lesson 27 – Steep Turns Maintenance | 3 | 3 | 56% |
|  | Lesson 27 – Steep Turns Roll Out | 3 | 2 | 44% |
|  | Lesson 27 – Power Off Stalls | 1 | 1 | 78% |
|  | Lesson 27 - Power On Stalls | 1 | 2 | 33% |
|  | Lesson 27 – Symptoms of Stall | 1 | 1 | 63% |
|  | Lesson 27 – Overall Grade | E | D | 13% |
|  | Lesson 28 – Slow Flight | 4 | 2 | 0% |
|  | Lesson 28 – Steep Turns | 3 | 2 | 44% |
|  | Lesson 28 – Power Off Stalls | 4 | 2 | 0% |
|  | Lesson 28 – Power On Stalls | 4 | 2 | 0% |
|  | Lesson 28 – Overall Grade | E | C | 25% |
|  | Lesson 43 – Slow Flight | 2 | 2 | 44% |
|  | Lesson 43 – Steep Turns | 3 | 3 | 100% |
|  | Lesson 43 – Power Off Stalls | 1 | 2 | 33% |
|  | Lesson 43 – Power On Stalls | 3 | 3 | 56% |
|  | Lesson 43 – Overall Grade | E | C | 38% |
|  | Lesson 48 – Slow Flight | 4 | 3 | 0% |
|  | Lesson 48 – Steep Turns | 2 | 2 | 89% |
|  | Lesson 48 – Power Off Stalls | 2 | 2 | 78% |
|  | Lesson 48 – Power On Stalls | 3 | 3 | 67% |
|  | Lesson 48 – Overall Grade | E | D | 25% |

Table 8. Post-test assessment exercises – Frequency data 2+ years of experience – 1=low performance; 4 = high performance.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Group | Description | Gold Standard Grade | Respondents Mode Grade | Percentage of Agreement with Gold Standard |
| 2 + yrs experience as flight instructor (N=13) | Lesson 27 – Slow Flight | 2 | 2 | 59% |
|  | Lesson 27 – Steep Turns Entry | 4 | 2 and 3 | 12% |
|  | Lesson 27 – Steep Turns Maintenance | 3 | 3 | 59% |
|  | Lesson 27 – Steep Turns Roll Out | 3 | 3 | 69% |
|  | Lesson 27 – Power Off Stalls | 1 | 2 | 41% |
|  | Lesson 27 - Power On Stalls | 1 | 2 | 41% |
|  | Lesson 27 – Symptoms of Stall | 1 | 2 | 47% |
|  | Lesson 27 – Overall Grade | E | E | 47% |
|  | Lesson 28 – Slow Flight | 4 | 2 | 18% |
|  | Lesson 28 – Steep Turns | 3 | 3 | 60% |
|  | Lesson 28 – Power Off Stalls | 4 | 2 | 12% |
|  | Lesson 28 – Power On Stalls | 4 | 2 | 12% |
|  | Lesson 28 – Overall Grade | E | E | 81% |
|  | Lesson 43 – Slow Flight | 2 | 2 | 59% |
|  | Lesson 43 – Steep Turns | 3 | 3 | 81% |
|  | Lesson 43 – Power Off Stalls | 1 | 2 | 29% |
|  | Lesson 43 – Power On Stalls | 3 | 3 | 53% |
|  | Lesson 43 – Overall Grade | E | E | 65% |
|  | Lesson 48 – Slow Flight | 4 | 3 | 24% |
|  | Lesson 48 – Steep Turns | 2 | 2 | 88% |
|  | Lesson 48 – Power Off Stalls | 2 | 3 | 47% |
|  | Lesson 48 – Power On Stalls | 3 | 3 | 53% |
|  | Lesson 48 – Overall Grade | E | E | 65% |