# IMMERSIVE TECHNOLOGIES IN AEROSPACE TRAINING

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PREPARED BY:
Inquiry Minded Consulting (IMC) and UP360, for Downsview Aerospace Innovation & Research (DAIR)

IN PARTNERSHIP WITH:
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DAIR
DOWNSVIEW AEROSPACE INNOVATION & RESEARCH | DOWNSVIEW AÉROSPATIALE INNOVATION & RECHERCHE

OAC
ONTARIO AEROSPACE COUNCIL

COAST
Competencies Online Advancement Skills & Training

Canada | Employment Ontario / Emploi Ontario | Ontario

DAIR - Pre Survey - Overall Pre

## Group

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Pilot | 27 | 51.9 | 51.9 | 51.9 |
| | Control | 25 | 48.1 | 48.1 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

## Statistics

| | | 1a. Safety practices of a Composite Technician | 1b. Materials used in composite fabrication | 1c. Processes for composite fabrication | 1d. Specific terms used in composite fabrication | 1e. Types of machinery used in composite fabrication |
|---|---|---|---|---|---|---|
| N | Valid | 52 | 52 | 52 | 52 | 52 |
| | Missing | 0 | 0 | 0 | 0 | 0 |
| Mean | | 3.88 | 3.48 | 3.44 | 3.33 | 3.35 |
| Median | | 4.00 | 4.00 | 4.00 | 3.00 | 3.00 |
| Mode | | 4 | 4 | 4 | 4 | 3 |

## Statistics

| | | 1f. Workspace organization requirements for composite fabrication | 1g. Mathematics functions required for composite fabrication | 1h. How to use the technical data manuals and information needed for composite fabrication | 1i. How to assure quality in composite fabrication | 1j. Understanding foreign object damage in composite fabrication |
|---|---|---|---|---|---|---|
| N | Valid | 52 | 52 | 52 | 52 | 52 |
| | Missing | 0 | 0 | 0 | 0 | 0 |
| Mean | | 3.81 | 3.25 | 3.54 | 3.75 | 4.06 |
| Median | | 4.00 | 3.00 | 4.00 | 4.00 | 4.00 |
| Mode | | 4 | 4 | 4 | 4 | 4 |

DAIR - Pre Survey - Overall Pre

## Statistics

| | | 1k. How to use measuring tools in composite fabrication | 1l. How to use hand tools in composite fabrication | 1m. How to use power tools in composite fabrication | 1n. How to use fixtures in composite fabrication | 1o. How to perform key lamination processes for composite fabrication |
|---|---|---|---|---|---|---|
| N | Valid | 52 | 52 | 52 | 52 | 52 |
| | Missing | 0 | 0 | 0 | 0 | 0 |
| Mean | | 3.96 | 3.96 | 3.63 | 3.56 | 3.25 |
| Median | | 4.00 | 4.00 | 4.00 | 4.00 | 3.00 |
| Mode | | 4 | 4[a] | 3[a] | 4 | 4 |

## Statistics

| | | 1p. How to perform key post lamination processes for composite fabrication | 1q. How to perform key assembly processes for composite fabrication |
|---|---|---|---|
| N | Valid | 52 | 52 |
| | Missing | 0 | 0 |
| Mean | | 3.02 | 3.35 |
| Median | | 3.00 | 3.50 |
| Mode | | 4 | 4 |

a. Multiple modes exist. The smallest value is shown

## 1a. Safety practices of a Composite Technician

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 2 | 3.8 | 3.8 | 3.8 |
| | 2 | 3 | 5.8 | 5.8 | 9.6 |
| | 3 | 10 | 19.2 | 19.2 | 28.8 |
| | 4 | 21 | 40.4 | 40.4 | 69.2 |
| | 5 - Excellent | 16 | 30.8 | 30.8 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

DAIR - Pre Survey - Overall Pre

## 1b. Materials used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 2 | 3.8 | 3.8 | 3.8 |
| | 2 | 6 | 11.5 | 11.5 | 15.4 |
| | 3 | 16 | 30.8 | 30.8 | 46.2 |
| | 4 | 21 | 40.4 | 40.4 | 86.5 |
| | 5 - Excellent | 7 | 13.5 | 13.5 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

## 1c. Processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 3 | 5.8 | 5.8 | 5.8 |
| | 2 | 3 | 5.8 | 5.8 | 11.5 |
| | 3 | 19 | 36.5 | 36.5 | 48.1 |
| | 4 | 22 | 42.3 | 42.3 | 90.4 |
| | 5 - Excellent | 5 | 9.6 | 9.6 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

## 1d. Specific terms used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 2 | 3.8 | 3.8 | 3.8 |
| | 2 | 9 | 17.3 | 17.3 | 21.2 |
| | 3 | 17 | 32.7 | 32.7 | 53.8 |
| | 4 | 18 | 34.6 | 34.6 | 88.5 |
| | 5 - Excellent | 6 | 11.5 | 11.5 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

DAIR - Pre Survey - Overall Pre

### 1e. Types of machinery used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 2 | 3.8 | 3.8 | 3.8 |
| | 2 | 5 | 9.6 | 9.6 | 13.5 |
| | 3 | 22 | 42.3 | 42.3 | 55.8 |
| | 4 | 19 | 36.5 | 36.5 | 92.3 |
| | 5 - Excellent | 4 | 7.7 | 7.7 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 1f. Workspace organization requirements for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 1 | 1.9 | 1.9 | 1.9 |
| | 2 | 5 | 9.6 | 9.6 | 11.5 |
| | 3 | 11 | 21.2 | 21.2 | 32.7 |
| | 4 | 21 | 40.4 | 40.4 | 73.1 |
| | 5 - Excellent | 14 | 26.9 | 26.9 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 1g. Mathematics functions required for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 2 | 3.8 | 3.8 | 3.8 |
| | 2 | 10 | 19.2 | 19.2 | 23.1 |
| | 3 | 17 | 32.7 | 32.7 | 55.8 |
| | 4 | 19 | 36.5 | 36.5 | 92.3 |
| | 5 - Excellent | 4 | 7.7 | 7.7 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

DAIR - Pre Survey - Overall Pre

### 1h. How to use the technical data manuals and information needed for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 1 | 1.9 | 1.9 | 1.9 |
| | 2 | 8 | 15.4 | 15.4 | 17.3 |
| | 3 | 15 | 28.8 | 28.8 | 46.2 |
| | 4 | 18 | 34.6 | 34.6 | 80.8 |
| | 5 - Excellent | 10 | 19.2 | 19.2 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 1i. How to assure quality in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 2 | 3.8 | 3.8 | 3.8 |
| | 2 | 4 | 7.7 | 7.7 | 11.5 |
| | 3 | 10 | 19.2 | 19.2 | 30.8 |
| | 4 | 25 | 48.1 | 48.1 | 78.8 |
| | 5 - Excellent | 11 | 21.2 | 21.2 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 1j. Understanding foreign object damage in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 2 | 4 | 7.7 | 7.7 | 7.7 |
| | 3 | 6 | 11.5 | 11.5 | 19.2 |
| | 4 | 25 | 48.1 | 48.1 | 67.3 |
| | 5 - Excellent | 17 | 32.7 | 32.7 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

DAIR - Pre Survey - Overall Pre

### 1k. How to use measuring tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 2 | 1 | 1.9 | 1.9 | 1.9 |
| | 3 | 14 | 26.9 | 26.9 | 28.8 |
| | 4 | 23 | 44.2 | 44.2 | 73.1 |
| | 5 - Excellent | 14 | 26.9 | 26.9 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 1l. How to use hand tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 1 | 1.9 | 1.9 | 1.9 |
| | 2 | 2 | 3.8 | 3.8 | 5.8 |
| | 3 | 13 | 25.0 | 25.0 | 30.8 |
| | 4 | 18 | 34.6 | 34.6 | 65.4 |
| | 5 - Excellent | 18 | 34.6 | 34.6 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 1m. How to use power tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 2 | 3.8 | 3.8 | 3.8 |
| | 2 | 6 | 11.5 | 11.5 | 15.4 |
| | 3 | 15 | 28.8 | 28.8 | 44.2 |
| | 4 | 15 | 28.8 | 28.8 | 73.1 |
| | 5 - Excellent | 14 | 26.9 | 26.9 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

DAIR - Pre Survey - Overall Pre

### 1n. How to use fixtures in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 2 | 8 | 15.4 | 15.4 | 15.4 |
| | 3 | 16 | 30.8 | 30.8 | 46.2 |
| | 4 | 19 | 36.5 | 36.5 | 82.7 |
| | 5 - Excellent | 9 | 17.3 | 17.3 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 1o. How to perform key lamination processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 3 | 5.8 | 5.8 | 5.8 |
| | 2 | 10 | 19.2 | 19.2 | 25.0 |
| | 3 | 16 | 30.8 | 30.8 | 55.8 |
| | 4 | 17 | 32.7 | 32.7 | 88.5 |
| | 5 - Excellent | 6 | 11.5 | 11.5 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 1p. How to perform key post lamination processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 5 | 9.6 | 9.6 | 9.6 |
| | 2 | 12 | 23.1 | 23.1 | 32.7 |
| | 3 | 15 | 28.8 | 28.8 | 61.5 |
| | 4 | 17 | 32.7 | 32.7 | 94.2 |
| | 5 - Excellent | 3 | 5.8 | 5.8 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

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### 1q. How to perform key assembly processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 5 | 9.6 | 9.6 | 9.6 |
| | 2 | 9 | 17.3 | 17.3 | 26.9 |
| | 3 | 12 | 23.1 | 23.1 | 50.0 |
| | 4 | 15 | 28.8 | 28.8 | 78.8 |
| | 5 - Excellent | 11 | 21.2 | 21.2 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### Statistics

| | | 2a. Safety practices of a Composite Technician | 2b. Materials used in composite fabrication | 2c. Processes for composite fabrication | 2d. Specific terms used in composite fabrication | 2e. Types of machinery used in composite fabrication |
|---|---|---|---|---|---|---|
| N | Valid | 52 | 52 | 52 | 52 | 52 |
| | Missing | 0 | 0 | 0 | 0 | 0 |
| Mean | | 3.90 | 3.67 | 3.54 | 3.42 | 3.46 |
| Median | | 4.00 | 4.00 | 3.50 | 3.50 | 4.00 |
| Mode | | 4 | 4 | 3 | 4 | 4 |

### Statistics

| | | 2f. Workspace organization requirements for composite fabrication | 2g. Mathematics functions required for composite fabrication | 2h. How to use the technical data manuals and information needed for composite fabrication | 2i. How to assure quality in composite fabrication | 2j. Understanding foreign object damage in composite fabrication |
|---|---|---|---|---|---|---|
| N | Valid | 52 | 52 | 52 | 52 | 52 |
| | Missing | 0 | 0 | 0 | 0 | 0 |
| Mean | | 3.79 | 3.33 | 3.62 | 3.94 | 4.00 |
| Median | | 4.00 | 3.50 | 4.00 | 4.00 | 4.00 |
| Mode | | 4 | 4 | 4 | 4 | 4 |

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## Statistics

| | | 2k. How to use measuring tools in composite fabrication | 2l. How to use hand tools in composite fabrication | 2m. How to use power tools in composite fabrication | 2n. How to use fixtures in composite fabrication | 2o. How to perform key lamination processes for composite fabrication |
|---|---|---|---|---|---|---|
| N | Valid | 52 | 52 | 52 | 52 | 52 |
| | Missing | 0 | 0 | 0 | 0 | 0 |
| Mean | | 3.79 | 3.85 | 3.71 | 3.52 | 3.23 |
| Median | | 4.00 | 4.00 | 4.00 | 3.00 | 3.00 |
| Mode | | 4 | 4 | 3[a] | 3 | 3 |

## Statistics

| | | 2p. How to perform key post lamination processes for composite fabrication | 2q. How to perform key assembly processes for composite fabrication |
|---|---|---|---|
| N | Valid | 52 | 52 |
| | Missing | 0 | 0 |
| Mean | | 3.15 | 3.35 |
| Median | | 3.00 | 3.00 |
| Mode | | 3 | 4 |

a. Multiple modes exist. The smallest value is shown

## 2a. Safety practices of a Composite Technician

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 1 | 1.9 | 1.9 | 1.9 |
| | 2 | 2 | 3.8 | 3.8 | 5.8 |
| | 3 | 12 | 23.1 | 23.1 | 28.8 |
| | 4 | 23 | 44.2 | 44.2 | 73.1 |
| | 5 - Excellent | 14 | 26.9 | 26.9 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

DAIR - Pre Survey - Overall Pre

### 2b. Materials used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 3 | 5.8 | 5.8 | 5.8 |
| | 2 | 2 | 3.8 | 3.8 | 9.6 |
| | 3 | 12 | 23.1 | 23.1 | 32.7 |
| | 4 | 27 | 51.9 | 51.9 | 84.6 |
| | 5 - Excellent | 8 | 15.4 | 15.4 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 2c. Processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 2 | 3.8 | 3.8 | 3.8 |
| | 2 | 4 | 7.7 | 7.7 | 11.5 |
| | 3 | 20 | 38.5 | 38.5 | 50.0 |
| | 4 | 16 | 30.8 | 30.8 | 80.8 |
| | 5 - Excellent | 10 | 19.2 | 19.2 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 2d. Specific terms used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 2 | 3.8 | 3.8 | 3.8 |
| | 2 | 5 | 9.6 | 9.6 | 13.5 |
| | 3 | 19 | 36.5 | 36.5 | 50.0 |
| | 4 | 21 | 40.4 | 40.4 | 90.4 |
| | 5 - Excellent | 5 | 9.6 | 9.6 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

DAIR - Pre Survey - Overall Pre

## 2e. Types of machinery used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 3 | 5.8 | 5.8 | 5.8 |
| | 2 | 4 | 7.7 | 7.7 | 13.5 |
| | 3 | 18 | 34.6 | 34.6 | 48.1 |
| | 4 | 20 | 38.5 | 38.5 | 86.5 |
| | 5 - Excellent | 7 | 13.5 | 13.5 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

## 2f. Workspace organization requirements for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 2 | 3.8 | 3.8 | 3.8 |
| | 2 | 2 | 3.8 | 3.8 | 7.7 |
| | 3 | 13 | 25.0 | 25.0 | 32.7 |
| | 4 | 23 | 44.2 | 44.2 | 76.9 |
| | 5 - Excellent | 12 | 23.1 | 23.1 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

## 2g. Mathematics functions required for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 2 | 3.8 | 3.8 | 3.8 |
| | 2 | 9 | 17.3 | 17.3 | 21.2 |
| | 3 | 15 | 28.8 | 28.8 | 50.0 |
| | 4 | 22 | 42.3 | 42.3 | 92.3 |
| | 5 - Excellent | 4 | 7.7 | 7.7 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

DAIR - Pre Survey - Overall Pre

### 2h. How to use the technical data manuals and information needed for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 1 | 1.9 | 1.9 | 1.9 |
| | 2 | 3 | 5.8 | 5.8 | 7.7 |
| | 3 | 19 | 36.5 | 36.5 | 44.2 |
| | 4 | 21 | 40.4 | 40.4 | 84.6 |
| | 5 - Excellent | 8 | 15.4 | 15.4 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 2i. How to assure quality in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 2 | 3.8 | 3.8 | 3.8 |
| | 2 | 1 | 1.9 | 1.9 | 5.8 |
| | 3 | 10 | 19.2 | 19.2 | 25.0 |
| | 4 | 24 | 46.2 | 46.2 | 71.2 |
| | 5 - Excellent | 15 | 28.8 | 28.8 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 2j. Understanding foreign object damage in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 1 | 1.9 | 1.9 | 1.9 |
| | 2 | 2 | 3.8 | 3.8 | 5.8 |
| | 3 | 6 | 11.5 | 11.5 | 17.3 |
| | 4 | 30 | 57.7 | 57.7 | 75.0 |
| | 5 - Excellent | 13 | 25.0 | 25.0 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

DAIR - Pre Survey - Overall Pre

### 2k. How to use measuring tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 1 | 1.9 | 1.9 | 1.9 |
| | 2 | 3 | 5.8 | 5.8 | 7.7 |
| | 3 | 13 | 25.0 | 25.0 | 32.7 |
| | 4 | 24 | 46.2 | 46.2 | 78.8 |
| | 5 - Excellent | 11 | 21.2 | 21.2 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 2l. How to use hand tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 1 | 1.9 | 1.9 | 1.9 |
| | 2 | 3 | 5.8 | 5.8 | 7.7 |
| | 3 | 14 | 26.9 | 26.9 | 34.6 |
| | 4 | 19 | 36.5 | 36.5 | 71.2 |
| | 5 - Excellent | 15 | 28.8 | 28.8 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 2m. How to use power tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 1 | 1.9 | 1.9 | 1.9 |
| | 2 | 4 | 7.7 | 7.7 | 9.6 |
| | 3 | 17 | 32.7 | 32.7 | 42.3 |
| | 4 | 17 | 32.7 | 32.7 | 75.0 |
| | 5 - Excellent | 13 | 25.0 | 25.0 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

DAIR - Pre Survey - Overall Pre

### 2n. How to use fixtures in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 1 | 1.9 | 1.9 | 1.9 |
| | 2 | 5 | 9.6 | 9.6 | 11.5 |
| | 3 | 22 | 42.3 | 42.3 | 53.8 |
| | 4 | 14 | 26.9 | 26.9 | 80.8 |
| | 5 - Excellent | 10 | 19.2 | 19.2 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 2o. How to perform key lamination processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 3 | 5.8 | 5.8 | 5.8 |
| | 2 | 9 | 17.3 | 17.3 | 23.1 |
| | 3 | 19 | 36.5 | 36.5 | 59.6 |
| | 4 | 15 | 28.8 | 28.8 | 88.5 |
| | 5 - Excellent | 6 | 11.5 | 11.5 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 2p. How to perform key post lamination processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 3 | 5.8 | 5.8 | 5.8 |
| | 2 | 9 | 17.3 | 17.3 | 23.1 |
| | 3 | 21 | 40.4 | 40.4 | 63.5 |
| | 4 | 15 | 28.8 | 28.8 | 92.3 |
| | 5 - Excellent | 4 | 7.7 | 7.7 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

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### 2q. How to perform key assembly processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 - Poor | 4 | 7.7 | 7.7 | 7.7 |
| | 2 | 8 | 15.4 | 15.4 | 23.1 |
| | 3 | 15 | 28.8 | 28.8 | 51.9 |
| | 4 | 16 | 30.8 | 30.8 | 82.7 |
| | 5 - Excellent | 9 | 17.3 | 17.3 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 3. Please tell us the main reasons for participating in this training program. Please check all that apply.

| | | Responses | | Percent of Cases |
|---|---|---|---|---|
| | | N | Percent | |
| q3[a] | My employer encouraged me to participate | 34 | 25.4% | 65.4% |
| | It will help update my current skills | 30 | 22.4% | 57.7% |
| | I want to build my skills in the aerospace sector in general | 35 | 26.1% | 67.3% |
| | I am particularly interested in composites in aerospace training | 19 | 14.2% | 36.5% |
| | It will help me get a better job in future | 13 | 9.7% | 25.0% |
| | Something else? What? | 3 | 2.2% | 5.8% |
| Total | | 134 | 100.0% | 257.7% |

a. Dichotomy group tabulated at value 1.

DAIR - Pre Survey - Overall Pre

### 3. Please tell us the main reasons for participating in this training program. Please check all that apply.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | | 49 | 94.2 | 94.2 | 94.2 |
| | I was picked | 1 | 1.9 | 1.9 | 96.2 |
| | I was picked to participate | 1 | 1.9 | 1.9 | 98.1 |
| | It will help me with my internal audits | 1 | 1.9 | 1.9 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

### 4. Please tell us what you are hoping will result from your participation in this training program. Please check all that apply.

| | | Responses | | Percent of Cases |
|---|---|---|---|---|
| | | N | Percent | |
| q4[a] | It will add to my current skill set | 46 | 32.2% | 88.5% |
| | It will make me more confident in my current job | 37 | 25.9% | 71.2% |
| | It will help me understand what other opportunities I might have in the aerospace sector | 29 | 20.3% | 55.8% |
| | It will help me get the job that I want in future | 16 | 11.2% | 30.8% |
| | It is a particular area of interest of mine | 14 | 9.8% | 26.9% |
| | Something else? What? | 1 | 0.7% | 1.9% |
| Total | | 143 | 100.0% | 275.0% |

a. Dichotomy group tabulated at value 1.

### 4. Please tell us what you are hoping will result from your participation in this training program. Please check all that apply.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | | 51 | 98.1 | 98.1 | 98.1 |
| | Help with wage increase | 1 | 1.9 | 1.9 | 100.0 |
| | Total | 52 | 100.0 | 100.0 | |

DAIR - Pre Survey - Overall Pre

**5. What are you most curious to learn from your participation in this course?**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | | 17 | 32.7 | 32.7 | 32.7 |
| | A better understanding of the job, terms and skills | 1 | 1.9 | 1.9 | 34.6 |
| | Any industry standard practices that I have yet to be exposed to in my career | 1 | 1.9 | 1.9 | 36.5 |
| | Anything new | 1 | 1.9 | 1.9 | 38.5 |
| | Better understanding of how composites work. | 1 | 1.9 | 1.9 | 40.4 |
| | Due to me being a new hire, my skillset is very limited. I think this will develope my skills and my progress in the company! | 1 | 1.9 | 1.9 | 42.3 |
| | Everything there is to learn | 1 | 1.9 | 1.9 | 44.2 |
| | Everything. I am fairly new and I find the more information I learn the better for me. | 1 | 1.9 | 1.9 | 46.2 |
| | Find out things I currently do not know. | 1 | 1.9 | 1.9 | 48.1 |
| | I am curious to know how a virtual learning experience will be different from in class or in lab learning experiences. Also excited about the knowledge I can acquire from this course. | 1 | 1.9 | 1.9 | 50.0 |
| | I am interested in all aspects of the course since most of my training in composites are hands on, not course or school related. | 1 | 1.9 | 1.9 | 51.9 |
| | I am looking forward to a more hands on approach to learning about composites layup. | 1 | 1.9 | 1.9 | 53.8 |
| | I am most curious to learn what my skill level and knowledge are according to the training program | 1 | 1.9 | 1.9 | 55.8 |
| | I want to soak up any and all knowledge that I can to better myself for now and any future opportunities that I may recieve in the future. | 1 | 1.9 | 1.9 | 57.7 |
| | I would like to learn more about the technical side of composit layup. | 1 | 1.9 | 1.9 | 59.6 |
| | I'm most curious to learn what composite applications are currently being used in aerospace and how I may be able to focus training to best suit my skillset. | 1 | 1.9 | 1.9 | 61.5 |
| | Injection mold layups | 1 | 1.9 | 1.9 | 63.5 |
| | Lamination processes and more assembly techniques | 1 | 1.9 | 1.9 | 65.4 |
| | Layup | 1 | 1.9 | 1.9 | 67.3 |
| | Learning on how to work with the different composite materials and get in depth details on ther processes. | 1 | 1.9 | 1.9 | 69.2 |
| | Learning other things then just lamination | 1 | 1.9 | 1.9 | 71.2 |
| | Manufacturing processes that I haven't seen or worked on before | 1 | 1.9 | 1.9 | 73.1 |
| | More in depth ways of how things work and why we do things certain ways. also some tips and tricks that may help me in everyday work | 1 | 1.9 | 1.9 | 75.0 |
| | More skills in my current job. | 1 | 1.9 | 1.9 | 76.9 |
| | New advance processing for composite fabrication | 1 | 1.9 | 1.9 | 78.8 |
| | Nothing specific the more I know it is better for my performance and nolage of the layup. | 1 | 1.9 | 1.9 | 80.8 |

DAIR - Pre Survey - Overall Pre

**5. What are you most curious to learn from your participation in this course?**

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Practical knowledge in aerospace composite manufacturing. | 1 | 1.9 | 1.9 | 82.7 |
| The break down and processing of everything involved from start to finish. | 1 | 1.9 | 1.9 | 84.6 |
| The different processes in this course | 1 | 1.9 | 1.9 | 86.5 |
| The things I don't know | 1 | 1.9 | 1.9 | 88.5 |
| To help me better my skills | 1 | 1.9 | 1.9 | 90.4 |
| To learn about composite | 1 | 1.9 | 1.9 | 92.3 |
| To learn more ideas and to be more knowledgeable in the aerospace industry.To do more things in relation to my job. | 1 | 1.9 | 1.9 | 94.2 |
| Understanding what technical skills and knowledge go into each department of the composite area of our facility. | 1 | 1.9 | 1.9 | 96.2 |
| Updating my skills in the composite area and learn how to be more efficient.. | 1 | 1.9 | 1.9 | 98.1 |
| Use of composite tooling. | 1 | 1.9 | 1.9 | 100.0 |
| Total | 52 | 100.0 | 100.0 | |

DAIR - Pre Survey - T Test

## Group Statistics

| | Group | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| 1a. Safety practices of a Composite Technician | Pilot | 27 | 4.00 | 1.144 | .220 |
| | Control | 25 | 3.76 | .926 | .185 |
| 1b. Materials used in composite fabrication | Pilot | 27 | 3.56 | 1.050 | .202 |
| | Control | 25 | 3.40 | .957 | .191 |
| 1c. Processes for composite fabrication | Pilot | 27 | 3.52 | 1.087 | .209 |
| | Control | 25 | 3.36 | .810 | .162 |
| 1d. Specific terms used in composite fabrication | Pilot | 27 | 3.52 | 1.051 | .202 |
| | Control | 25 | 3.12 | .971 | .194 |
| 1e. Types of machinery used in composite fabrication | Pilot | 27 | 3.48 | .893 | .172 |
| | Control | 25 | 3.20 | .913 | .183 |
| 1f. Workspace organization requirements for composite fabrication | Pilot | 27 | 4.04 | 1.126 | .217 |
| | Control | 25 | 3.56 | .821 | .164 |
| 1g. Mathematics functions required for composite fabrication | Pilot | 27 | 3.37 | 1.006 | .194 |
| | Control | 25 | 3.12 | .971 | .194 |
| 1h. How to use the technical data manuals and information needed for composite fabrication | Pilot | 27 | 3.78 | 1.013 | .195 |
| | Control | 25 | 3.28 | 1.021 | .204 |
| 1i. How to assure quality in composite fabrication | Pilot | 27 | 3.93 | 1.107 | .213 |
| | Control | 25 | 3.56 | .870 | .174 |
| 1j. Understanding foreign object damage in composite fabrication | Pilot | 27 | 4.15 | .949 | .183 |
| | Control | 25 | 3.96 | .790 | .158 |
| 1k. How to use measuring tools in composite fabrication | Pilot | 27 | 4.11 | .751 | .145 |
| | Control | 25 | 3.80 | .816 | .163 |
| 1l. How to use hand tools in composite fabrication | Pilot | 27 | 4.04 | 1.055 | .203 |
| | Control | 25 | 3.88 | .881 | .176 |
| 1m. How to use power tools in composite fabrication | Pilot | 27 | 3.56 | 1.281 | .247 |
| | Control | 25 | 3.72 | .936 | .187 |
| 1n. How to use fixtures in composite fabrication | Pilot | 27 | 3.48 | 1.014 | .195 |
| | Control | 25 | 3.64 | .907 | .181 |

DAIR - Pre Survey - T Test

## Group Statistics

| | Group | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| 1o. How to perform key lamination processes for composite fabrication | Pilot | 27 | 3.22 | 1.219 | .235 |
| | Control | 25 | 3.28 | .936 | .187 |
| 1p. How to perform key post lamination processes for composite fabrication | Pilot | 27 | 3.00 | 1.240 | .239 |
| | Control | 25 | 3.04 | .935 | .187 |
| 1q. How to perform key assembly processes for composite fabrication | Pilot | 27 | 3.30 | 1.463 | .282 |
| | Control | 25 | 3.40 | 1.041 | .208 |

**Independent Samples Test**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 95% Confidence Interval of the Difference | |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| 1a. Safety practices of a Composite Technician | Equal variances assumed | .311 | .579 | .828 | 50 | .412 | .240 | .290 | -.342 | .822 |
| | Equal variances not assumed | | | .835 | 49.151 | .408 | .240 | .288 | -.338 | .818 |
| 1b. Materials used in composite fabrication | Equal variances assumed | .276 | .602 | .557 | 50 | .580 | .156 | .279 | -.406 | .717 |
| | Equal variances not assumed | | | .559 | 49.990 | .579 | .156 | .278 | -.404 | .715 |
| 1c. Processes for composite fabrication | Equal variances assumed | 2.048 | .159 | .592 | 50 | .556 | .159 | .268 | -.379 | .696 |
| | Equal variances not assumed | | | .599 | 47.882 | .552 | .159 | .265 | -.374 | .691 |
| 1d. Specific terms used in composite fabrication | Equal variances assumed | .306 | .583 | 1.416 | 50 | .163 | .399 | .281 | -.167 | .964 |
| | Equal variances not assumed | | | 1.421 | 50.000 | .162 | .399 | .280 | -.165 | .962 |
| 1e. Types of machinery used in composite fabrication | Equal variances assumed | .000 | .992 | 1.123 | 50 | .267 | .281 | .251 | -.222 | .785 |
| | Equal variances not assumed | | | 1.123 | 49.502 | .267 | .281 | .251 | -.222 | .785 |
| 1f. Workspace organization requirements for composite fabrication | Equal variances assumed | 1.046 | .311 | 1.734 | 50 | .089 | .477 | .275 | -.076 | 1.030 |
| | Equal variances not assumed | | | 1.755 | 47.464 | .086 | .477 | .272 | -.070 | 1.024 |
| 1g. Mathematics functions required for composite fabrication | Equal variances assumed | .061 | .806 | .912 | 50 | .366 | .250 | .275 | -.301 | .802 |
| | Equal variances not assumed | | | .913 | 49.905 | .366 | .250 | .274 | -.300 | .801 |
| 1h. How to use the technical data manuals and information needed for composite fabrication | Equal variances assumed | .238 | .628 | 1.764 | 50 | .084 | .498 | .282 | -.069 | 1.065 |
| | Equal variances not assumed | | | 1.763 | 49.624 | .084 | .498 | .282 | -.069 | 1.065 |
| 1i. How to assure quality in composite fabrication | Equal variances assumed | .011 | .918 | 1.318 | 50 | .193 | .366 | .278 | -.192 | .923 |
| | Equal variances not assumed | | | 1.331 | 48.754 | .190 | .366 | .275 | -.187 | .919 |
| 1j. Understanding foreign object damage in composite fabrication | Equal variances assumed | 3.132 | .083 | .774 | 50 | .443 | .188 | .243 | -.300 | .676 |
| | Equal variances not assumed | | | .779 | 49.461 | .439 | .188 | .241 | -.297 | .673 |
| 1k. How to use measuring tools in composite fabrication | Equal variances assumed | .250 | .619 | 1.431 | 50 | .159 | .311 | .217 | -.125 | .748 |
| | Equal variances not assumed | | | 1.427 | 48.728 | .160 | .311 | .218 | -.127 | .749 |

# DAIR - Pre Survey - T Test

**Independent Samples Test**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 95% Confidence Interval of the Difference | |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| 1l. How to use hand tools in composite fabrication | Equal variances assumed | .179 | .674 | .580 | 50 | .565 | .157 | .271 | -.387 | .701 |
| | Equal variances not assumed | | | .584 | 49.495 | .562 | .157 | .269 | -.383 | .697 |
| 1m. How to use power tools in composite fabrication | Equal variances assumed | 3.458 | .069 | -.525 | 50 | .602 | -.164 | .313 | -.794 | .465 |
| | Equal variances not assumed | | | -.531 | 47.520 | .598 | -.164 | .310 | -.787 | .458 |
| 1n. How to use fixtures in composite fabrication | Equal variances assumed | .753 | .390 | -.592 | 50 | .556 | -.159 | .268 | -.696 | .379 |
| | Equal variances not assumed | | | -.595 | 49.947 | .555 | -.159 | .267 | -.694 | .377 |
| 1o. How to perform key lamination processes for composite fabrication | Equal variances assumed | 1.999 | .164 | -.190 | 50 | .850 | -.058 | .303 | -.667 | .551 |
| | Equal variances not assumed | | | -.192 | 48.394 | .848 | -.058 | .300 | -.661 | .546 |
| 1p. How to perform key post lamination processes for composite fabrication | Equal variances assumed | 1.165 | .286 | -.131 | 50 | .897 | -.040 | .306 | -.656 | .576 |
| | Equal variances not assumed | | | -.132 | 48.076 | .896 | -.040 | .303 | -.650 | .570 |
| 1q. How to perform key assembly processes for composite fabrication | Equal variances assumed | 5.520 | .023 | -.292 | 50 | .771 | -.104 | .355 | -.816 | .609 |
| | Equal variances not assumed | | | -.296 | 46.988 | .768 | -.104 | .350 | -.808 | .601 |

## Group Statistics

| | Group | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| 2a. Safety practices of a Composite Technician | Pilot | 27 | 4.07 | .997 | .192 |
| | Control | 25 | 3.72 | .792 | .158 |
| 2b. Materials used in composite fabrication | Pilot | 27 | 3.78 | 1.013 | .195 |
| | Control | 25 | 3.56 | .961 | .192 |
| 2c. Processes for composite fabrication | Pilot | 27 | 3.67 | 1.038 | .200 |
| | Control | 25 | 3.40 | 1.000 | .200 |
| 2d. Specific terms used in composite fabrication | Pilot | 27 | 3.44 | .934 | .180 |
| | Control | 25 | 3.40 | .957 | .191 |
| 2e. Types of machinery used in composite fabrication | Pilot | 27 | 3.56 | 1.013 | .195 |
| | Control | 25 | 3.36 | 1.036 | .207 |
| 2f. Workspace organization requirements for composite fabrication | Pilot | 27 | 3.93 | 1.035 | .199 |
| | Control | 25 | 3.64 | .907 | .181 |
| 2g. Mathematics functions required for composite fabrication | Pilot | 27 | 3.41 | 1.083 | .209 |
| | Control | 25 | 3.24 | .879 | .176 |

DAIR - Pre Survey - T Test

## Group Statistics

| | Group | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| 2h. How to use the technical data manuals and information needed for composite fabrication | Pilot | 27 | 3.78 | .934 | .180 |
| | Control | 25 | 3.44 | .821 | .164 |
| 2i. How to assure quality in composite fabrication | Pilot | 27 | 4.04 | 1.091 | .210 |
| | Control | 25 | 3.84 | .800 | .160 |
| 2j. Understanding foreign object damage in composite fabrication | Pilot | 27 | 4.11 | .892 | .172 |
| | Control | 25 | 3.88 | .781 | .156 |
| 2k. How to use measuring tools in composite fabrication | Pilot | 27 | 3.89 | .974 | .187 |
| | Control | 25 | 3.68 | .852 | .170 |
| 2l. How to use hand tools in composite fabrication | Pilot | 27 | 3.93 | 1.072 | .206 |
| | Control | 25 | 3.76 | .879 | .176 |
| 2m. How to use power tools in composite fabrication | Pilot | 27 | 3.74 | 1.095 | .211 |
| | Control | 25 | 3.68 | .900 | .180 |
| 2n. How to use fixtures in composite fabrication | Pilot | 27 | 3.56 | 1.013 | .195 |
| | Control | 25 | 3.48 | .963 | .193 |
| 2o. How to perform key lamination processes for composite fabrication | Pilot | 27 | 3.37 | 1.149 | .221 |
| | Control | 25 | 3.08 | .954 | .191 |
| 2p. How to perform key post lamination processes for composite fabrication | Pilot | 27 | 3.22 | 1.188 | .229 |
| | Control | 25 | 3.08 | .759 | .152 |
| 2q. How to perform key assembly processes for composite fabrication | Pilot | 27 | 3.37 | 1.305 | .251 |
| | Control | 25 | 3.32 | 1.030 | .206 |

# DAIR - Pre Survey - T Test

**Independent Samples Test**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 95% Confidence Interval of the Difference | |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| 2a. Safety practices of a Composite Technician | Equal variances assumed | .033 | .856 | 1.411 | 50 | .165 | .354 | .251 | -.150 | .858 |
| | Equal variances not assumed | | | 1.423 | 48.898 | .161 | .354 | .249 | -.146 | .854 |
| 2b. Materials used in composite fabrication | Equal variances assumed | .146 | .704 | .794 | 50 | .431 | .218 | .274 | -.333 | .769 |
| | Equal variances not assumed | | | .796 | 49.966 | .430 | .218 | .274 | -.332 | .768 |
| 2c. Processes for composite fabrication | Equal variances assumed | .060 | .808 | .942 | 50 | .351 | .267 | .283 | -.302 | .835 |
| | Equal variances not assumed | | | .943 | 49.914 | .350 | .267 | .283 | -.301 | .834 |
| 2d. Specific terms used in composite fabrication | Equal variances assumed | .034 | .855 | .169 | 50 | .866 | .044 | .262 | -.482 | .571 |
| | Equal variances not assumed | | | .169 | 49.469 | .866 | .044 | .263 | -.483 | .572 |
| 2e. Types of machinery used in composite fabrication | Equal variances assumed | .155 | .696 | .688 | 50 | .495 | .196 | .284 | -.375 | .766 |
| | Equal variances not assumed | | | .687 | 49.493 | .495 | .196 | .284 | -.376 | .767 |
| 2f. Workspace organization requirements for composite fabrication | Equal variances assumed | .165 | .686 | 1.056 | 50 | .296 | .286 | .271 | -.258 | .830 |
| | Equal variances not assumed | | | 1.061 | 49.861 | .294 | .286 | .269 | -.255 | .827 |
| 2g. Mathematics functions required for composite fabrication | Equal variances assumed | 1.594 | .213 | .609 | 50 | .545 | .167 | .275 | -.385 | .720 |
| | Equal variances not assumed | | | .614 | 49.186 | .542 | .167 | .273 | -.381 | .716 |
| 2h. How to use the technical data manuals and information needed for composite fabrication | Equal variances assumed | .037 | .848 | 1.381 | 50 | .173 | .338 | .245 | -.153 | .829 |
| | Equal variances not assumed | | | 1.388 | 49.873 | .171 | .338 | .243 | -.151 | .827 |
| 2i. How to assure quality in composite fabrication | Equal variances assumed | .258 | .614 | .738 | 50 | .464 | .197 | .267 | -.340 | .734 |
| | Equal variances not assumed | | | .746 | 47.577 | .459 | .197 | .264 | -.334 | .728 |
| 2j. Understanding foreign object damage in composite fabrication | Equal variances assumed | .219 | .642 | .991 | 50 | .327 | .231 | .233 | -.237 | .700 |
| | Equal variances not assumed | | | .996 | 49.857 | .324 | .231 | .232 | -.235 | .697 |
| 2k. How to use measuring tools in composite fabrication | Equal variances assumed | .017 | .898 | .820 | 50 | .416 | .209 | .255 | -.303 | .720 |
| | Equal variances not assumed | | | .824 | 49.851 | .414 | .209 | .253 | -.300 | .718 |
| 2l. How to use hand tools in composite fabrication | Equal variances assumed | .027 | .869 | .608 | 50 | .546 | .166 | .273 | -.383 | .714 |
| | Equal variances not assumed | | | .612 | 49.315 | .543 | .166 | .271 | -.379 | .710 |
| 2m. How to use power tools in composite fabrication | Equal variances assumed | .903 | .347 | .217 | 50 | .829 | .061 | .279 | -.500 | .622 |
| | Equal variances not assumed | | | .219 | 49.329 | .827 | .061 | .277 | -.496 | .618 |
| 2n. How to use fixtures in composite fabrication | Equal variances assumed | .020 | .887 | .275 | 50 | .784 | .076 | .275 | -.476 | .627 |
| | Equal variances not assumed | | | .276 | 49.961 | .784 | .076 | .274 | -.475 | .626 |
| 2o. How to perform key lamination processes for composite fabrication | Equal variances assumed | 1.203 | .278 | .987 | 50 | .328 | .290 | .294 | -.300 | .881 |
| | Equal variances not assumed | | | .994 | 49.443 | .325 | .290 | .292 | -.296 | .877 |
| 2p. How to perform key post lamination processes for composite fabrication | Equal variances assumed | 4.089 | .049 | .510 | 50 | .612 | .142 | .279 | -.418 | .703 |
| | Equal variances not assumed | | | .518 | 44.610 | .607 | .142 | .274 | -.411 | .695 |
| 2q. How to perform key assembly processes for composite fabrication | Equal variances assumed | 2.216 | .143 | .154 | 50 | .878 | .050 | .328 | -.608 | .709 |
| | Equal variances not assumed | | | .155 | 48.807 | .877 | .050 | .325 | -.602 | .703 |

DAIR - Exam 1 - Initial Results

## Frequencies

### Statistics

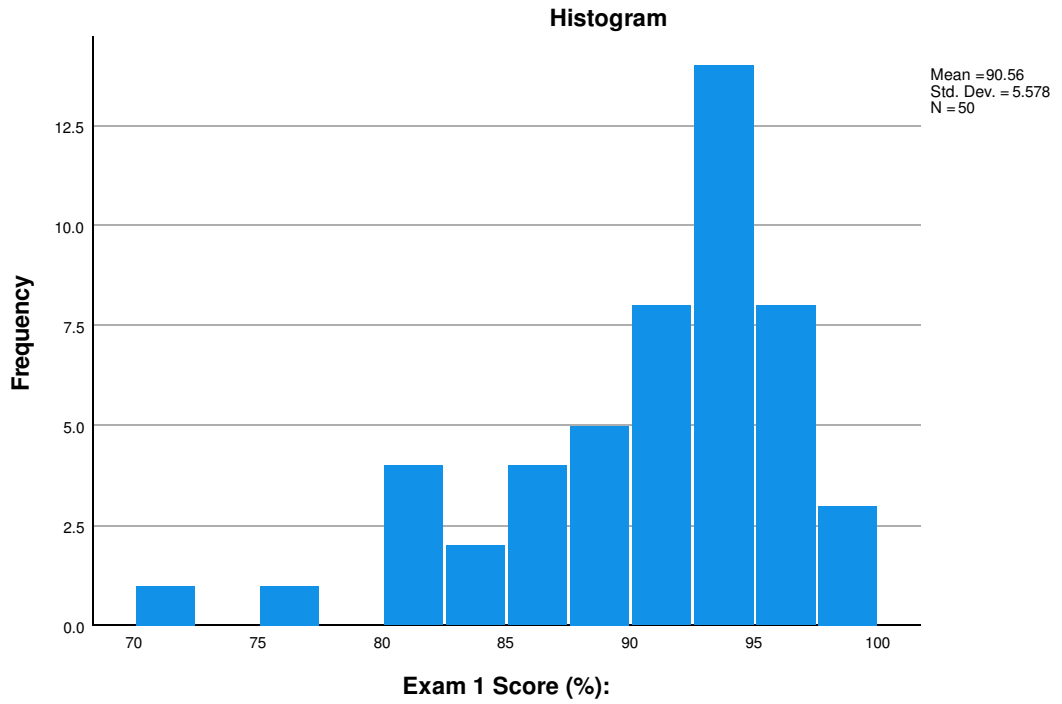
Exam 1 Score (%):

| | | |
|---|---|---|
| N | Valid | 50 |
| | Missing | 0 |
| Mean | | 90.56 |
| Median | | 92.00 |
| Mode | | 93 |
| Skewness | | -1.362 |
| Std. Error of Skewness | | .337 |
| Kurtosis | | 2.382 |
| Std. Error of Kurtosis | | .662 |

### Exam 1 Score (%):

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 71 | 1 | 2.0 | 2.0 | 2.0 |
| | 76 | 1 | 2.0 | 2.0 | 4.0 |
| | 82 | 4 | 8.0 | 8.0 | 12.0 |
| | 84 | 2 | 4.0 | 4.0 | 16.0 |
| | 87 | 4 | 8.0 | 8.0 | 24.0 |
| | 89 | 5 | 10.0 | 10.0 | 34.0 |
| | 91 | 8 | 16.0 | 16.0 | 50.0 |
| | 93 | 14 | 28.0 | 28.0 | 78.0 |
| | 96 | 8 | 16.0 | 16.0 | 94.0 |
| | 98 | 3 | 6.0 | 6.0 | 100.0 |
| | Total | 50 | 100.0 | 100.0 | |

DAIR - Exam 1 - Initial Results




## T-Test

### Group Statistics

| | Group: | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Exam 1 Score (%): | Immersion | 25 | 91.80 | 4.368 | .874 |
| | Non-Immersion | 25 | 89.32 | 6.421 | 1.284 |

**Independent Samples Test**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 95% Confidence Interval of the Difference | |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| Exam 1 Score (%): | Equal variances assumed | 5.115 | .028 | 1.597 | 48 | .117 | 2.480 | 1.553 | -.643 | 5.603 |
| | Equal variances not assumed | | | 1.597 | 42.298 | .118 | 2.480 | 1.553 | -.654 | 5.614 |

DAIR - Exam 1 - Initial Results

## Independent Samples Effect Sizes

| | | Standardizer[a] | Point Estimate | 95% Confidence Interval | |
|---|---|---|---|---|---|
| | | | | Lower | Upper |
| Exam 1 Score (%): | Cohen's d | 5.491 | .452 | -.112 | 1.011 |
| | Hedges' correction | 5.579 | .445 | -.111 | .995 |
| | Glass's delta | 6.421 | .386 | -.183 | .947 |

a. The denominator used in estimating the effect sizes.
Cohen's d uses the pooled standard deviation.
Hedges' correction uses the pooled standard deviation, plus a correction factor.
Glass's delta uses the sample standard deviation of the control group.

DAIR - Exam 2 - Frequencies

## Statistics

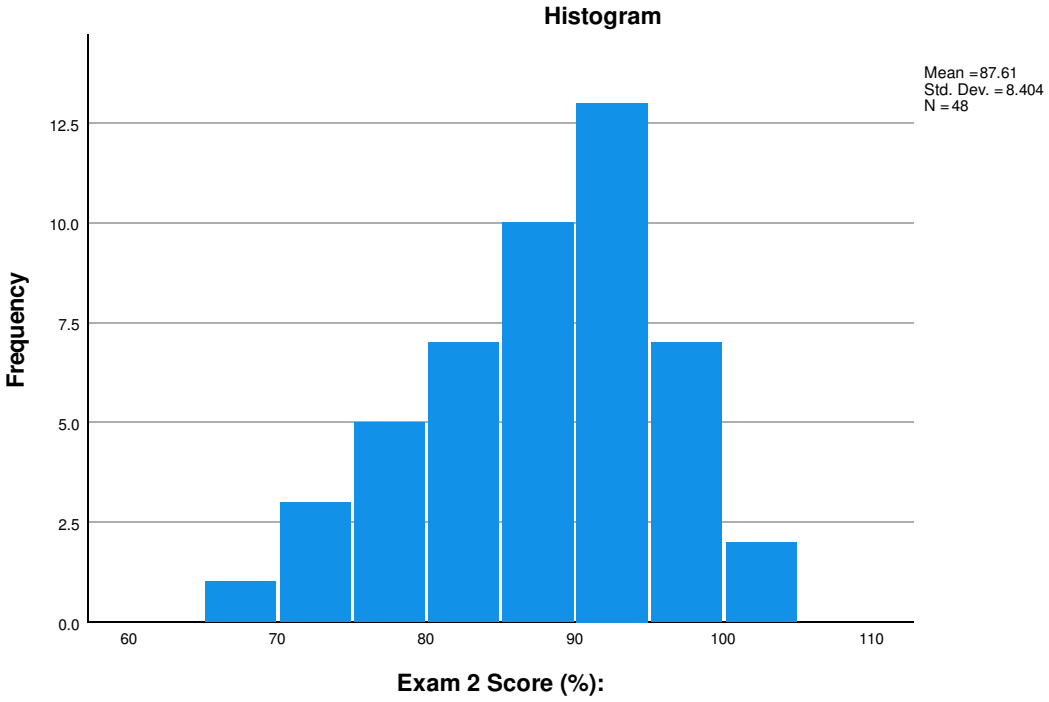
Exam 2 Score (%):

| | | |
|---|---|---|
| N | Valid | 48 |
| | Missing | 2 |
| Mean | | 87.61 |
| Median | | 88.60 |
| Mode | | 94 |

## Exam 2 Score (%):

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 66 | 1 | 2.0 | 2.1 | 2.1 |
| | 71 | 2 | 4.0 | 4.2 | 6.3 |
| | 74 | 1 | 2.0 | 2.1 | 8.3 |
| | 77 | 5 | 10.0 | 10.4 | 18.8 |
| | 80 | 1 | 2.0 | 2.1 | 20.8 |
| | 83 | 6 | 12.0 | 12.5 | 33.3 |
| | 86 | 6 | 12.0 | 12.5 | 45.8 |
| | 89 | 4 | 8.0 | 8.3 | 54.2 |
| | 91 | 5 | 10.0 | 10.4 | 64.6 |
| | 94 | 8 | 16.0 | 16.7 | 81.3 |
| | 97 | 7 | 14.0 | 14.6 | 95.8 |
| | 100 | 2 | 4.0 | 4.2 | 100.0 |
| | Total | 48 | 96.0 | 100.0 | |
| Missing | System | 2 | 4.0 | | |
| Total | | 50 | 100.0 | | |

DAIR - Exam 2 - Frequencies



DAIR - Exam 2 - Independent T-Test

## T-Test

### Group Statistics

| | Group: | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Exam 2 Score (%): | Immersion | 24 | 89.52 | 6.508 | 1.328 |
| | Non-Immersion | 24 | 85.70 | 9.714 | 1.983 |

**Independent Samples Test**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 95% Confidence Interval of the Difference | |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| Exam 2 Score (%): | Equal variances assumed | 4.416 | .041 | 1.599 | 46 | .117 | 3.817 | 2.387 | -.988 | 8.621 |
| | Equal variances not assumed | | | 1.599 | 40.184 | .118 | 3.817 | 2.387 | -1.006 | 8.640 |

### Independent Samples Effect Sizes

| | | | | 95% Confidence Interval | |
|---|---|---|---|---|---|
| | | Standardizer[a] | Point Estimate | Lower | Upper |
| Exam 2 Score (%): | Cohen's d | 8.268 | .462 | -.114 | 1.033 |
| | Hedges' correction | 8.406 | .454 | -.112 | 1.016 |
| | Glass's delta | 9.714 | .393 | -.188 | .966 |

a. The denominator used in estimating the effect sizes.
Cohen's d uses the pooled standard deviation.
Hedges' correction uses the pooled standard deviation, plus a correction factor.
Glass's delta uses the sample standard deviation of the control group.

DAIR - Exam 3 - Frequencies

## Statistics

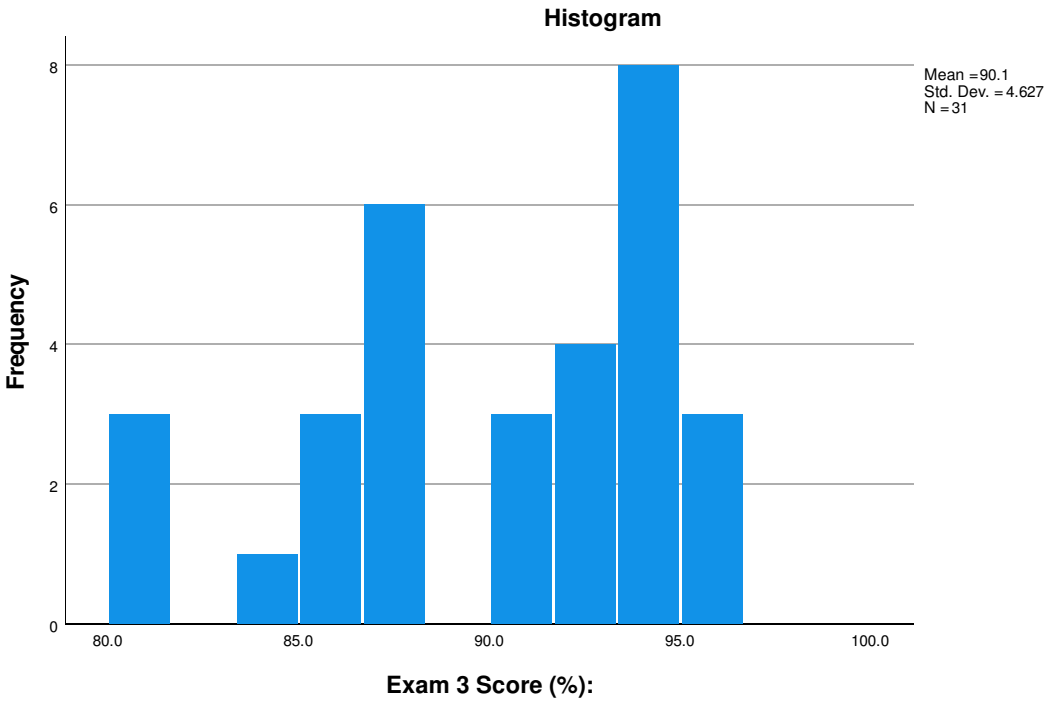
Exam 3 Score (%):

| | | |
|---|---|---|
| N | Valid | 31 |
| | Missing | 19 |
| Mean | | 90.103 |
| Median | | 90.200 |
| Mode | | 94.1 |

## Exam 3 Score (%):

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 80.4 | 3 | 6.0 | 9.7 | 9.7 |
| | 84.3 | 1 | 2.0 | 3.2 | 12.9 |
| | 85.4 | 1 | 2.0 | 3.2 | 16.1 |
| | 86.3 | 2 | 4.0 | 6.5 | 22.6 |
| | 88.2 | 6 | 12.0 | 19.4 | 41.9 |
| | 90.2 | 3 | 6.0 | 9.7 | 51.6 |
| | 92.2 | 4 | 8.0 | 12.9 | 64.5 |
| | 94.1 | 8 | 16.0 | 25.8 | 90.3 |
| | 96.1 | 3 | 6.0 | 9.7 | 100.0 |
| | Total | 31 | 62.0 | 100.0 | |
| Missing | System | 19 | 38.0 | | |
| Total | | 50 | 100.0 | | |

DAIR - Exam 3 - Frequencies



DAIR - Exam 3 - T-Test

## Group Statistics

| | Group: | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Exam 3 Score (%): | Immersion | 10 | 92.470 | 3.6265 | 1.1468 |
| | Non-Immersion | 21 | 88.976 | 4.6966 | 1.0249 |

**Independent Samples Test**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 95% Confidence Interval of the Difference | |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| Exam 3 Score (%): | Equal variances assumed | .974 | .332 | 2.070 | 29 | .047 | 3.4938 | 1.6876 | .0422 | 6.9454 |
| | Equal variances not assumed | | | 2.272 | 22.623 | .033 | 3.4938 | 1.5380 | .3092 | 6.6784 |

## Independent Samples Effect Sizes

| | | Standardizer[a] | Point Estimate | 95% Confidence Interval | |
|---|---|---|---|---|---|
| | | | | Lower | Upper |
| Exam 3 Score (%): | Cohen's d | 4.3925 | .795 | .009 | 1.569 |
| | Hedges' correction | 4.5103 | .775 | .009 | 1.528 |
| | Glass's delta | 4.6966 | .744 | -.052 | 1.523 |

a. The denominator used in estimating the effect sizes.
Cohen's d uses the pooled standard deviation.
Hedges' correction uses the pooled standard deviation, plus a correction factor.
Glass's delta uses the sample standard deviation of the control group.

DAIR - Post Immersive - Frequencies

### 1a. Safety practices of a Composite Technician

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 2 | 50.0 | 50.0 | 50.0 |
| | 5 - Excellent | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 1b. Materials used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 25.0 | 25.0 | 25.0 |
| | 4 | 2 | 50.0 | 50.0 | 75.0 |
| | 5 - Excellent | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 1c. Processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 25.0 | 25.0 | 25.0 |
| | 4 | 2 | 50.0 | 50.0 | 75.0 |
| | 5 - Excellent | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 1d. Specific terms used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 2 | 50.0 | 50.0 | 50.0 |
| | 5 - Excellent | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 1e. Types of machinery used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 3 | 75.0 | 75.0 | 75.0 |
| | 5 - Excellent | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Immersive - Frequencies

### 1f. Workspace organization requirements for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 75.0 | 75.0 | 75.0 |
| | 5 - Excellent | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 1g. Mathematics functions required for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 25.0 | 25.0 | 25.0 |
| | 4 | 2 | 50.0 | 50.0 | 75.0 |
| | 5 - Excellent | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 1h. How to use the technical data manuals and information needed for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 75.0 | 75.0 | 75.0 |
| | 5 - Excellent | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 1i. How to assure quality in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 1 | 25.0 | 25.0 | 25.0 |
| | 5 - Excellent | 3 | 75.0 | 75.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Immersive - Frequencies

### 1j. Understanding foreign object debris in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 1 | 25.0 | 25.0 | 25.0 |
| | 5 - Excellent | 3 | 75.0 | 75.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 1k. How to use measuring tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 2 | 50.0 | 50.0 | 50.0 |
| | 5 - Excellent | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 1l. How to use hand tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 1 | 25.0 | 25.0 | 25.0 |
| | 5 - Excellent | 3 | 75.0 | 75.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 1m. How to use power tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 2 | 50.0 | 50.0 | 50.0 |
| | 5 - Excellent | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 1n. How to use fixtures in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 25.0 | 25.0 | 25.0 |
| | 4 | 2 | 50.0 | 50.0 | 75.0 |
| | 5 - Excellent | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Immersive - Frequencies

### 1o. How to perform key lamination processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 2 | 50.0 | 50.0 | 50.0 |
| | 5 - Excellent | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 1p. How to perform key post lamination processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 2 | 50.0 | 50.0 | 50.0 |
| | 4 | 1 | 25.0 | 25.0 | 75.0 |
| | 5 - Excellent | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 1q. How to perform key assembly processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 25.0 | 25.0 | 25.0 |
| | 4 | 2 | 50.0 | 50.0 | 75.0 |
| | 5 - Excellent | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 2a. Safety practices of a Composite Technician

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 2 | 50.0 | 50.0 | 50.0 |
| | 5 - Excellent | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Immersive - Frequencies

### 2b. Materials used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 25.0 | 25.0 | 25.0 |
| | 4 | 2 | 50.0 | 50.0 | 75.0 |
| | 5 - Excellent | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 2c. Processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 75.0 | 75.0 | 75.0 |
| | 5 - Excellent | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 2d. Specific terms used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 25.0 | 25.0 | 25.0 |
| | 4 | 1 | 25.0 | 25.0 | 50.0 |
| | 5 - Excellent | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 2e. Types of machinery used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 2 | 50.0 | 50.0 | 50.0 |
| | 5 - Excellent | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Immersive - Frequencies

### 2f. Workspace organization requirements for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 2 | 50.0 | 50.0 | 50.0 |
| | 5 - Excellent | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 2g. Mathematics functions required for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 2 | 50.0 | 50.0 | 50.0 |
| | 5 - Excellent | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 2h. How to use the technical data manuals and information needed for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 2 | 50.0 | 50.0 | 50.0 |
| | 5 - Excellent | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 2i. How to assure quality in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 5 - Excellent | 4 | 100.0 | 100.0 | 100.0 |

### 2j. Understanding foreign object debris in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 1 | 25.0 | 25.0 | 25.0 |
| | 5 - Excellent | 3 | 75.0 | 75.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Immersive - Frequencies

### 2k. How to use measuring tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 2 | 50.0 | 50.0 | 50.0 |
| | 5 - Excellent | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 2l. How to use hand tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 2 | 50.0 | 50.0 | 50.0 |
| | 5 - Excellent | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 2m. How to use power tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 75.0 | 75.0 | 75.0 |
| | 5 - Excellent | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 2n. How to use fixtures in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 75.0 | 75.0 | 75.0 |
| | 5 - Excellent | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 2o. How to perform key lamination processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 2 | 50.0 | 50.0 | 50.0 |
| | 5 - Excellent | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Immersive - Frequencies

### 2p. How to perform key post lamination processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 75.0 | 75.0 | 75.0 |
| | 5 - Excellent | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 2q. How to perform key assembly processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 75.0 | 75.0 | 75.0 |
| | 5 - Excellent | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

| | | | |
|---|---|---|---|
| 3. Please tell us if any of these resulted from your participation in this training program. Please check all that apply. | It added to my current skills | Count | 3 |
| | | Column N % | 75% |
| | It made me more confident in my current job | Count | 2 |
| | | Column N % | 50% |
| | It helped me understand what other opportunities I might have in the aerospace sector | Count | 3 |
| | | Column N % | 75% |
| | It may help me get the job that I want in future | Count | 2 |
| | | Column N % | 50% |
| | It provided me with more knowledge in an area of interest of mine | Count | 2 |
| | | Column N % | 50% |
| | Something else? What? | Count | 1 |
| | | Column N % | 25% |
| | Total | Count | 4 |
| | | Column N % | 100% |

DAIR - Post Immersive - Frequencies

### 4. Is this the first time you have taken an aerospace technical training course online?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes | 4 | 100.0 | 100.0 | 100.0 |

### 5a. Taught me new skills involved in the work of a composite technician

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | A Lot of the Time | 3 | 75.0 | 75.0 | 75.0 |
| | Some of the Time | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 5b. Taught me skills that I will be able to use in my current job

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | A Lot of the Time | 2 | 50.0 | 50.0 | 50.0 |
| | Some of the Time | 1 | 25.0 | 25.0 | 75.0 |
| | Hardly Ever | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 5c. Helped me gain knowledge that will be useful to me in the future

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 1 | 25.0 | 25.0 | 25.0 |
| | A Lot of the Time | 2 | 50.0 | 50.0 | 75.0 |
| | Some of the Time | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Immersive - Frequencies

### 5d. Were easy to follow

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 1 | 25.0 | 25.0 | 25.0 |
| | A Lot of the Time | 2 | 50.0 | 50.0 | 75.0 |
| | Some of the Time | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 5e. Used words and phrases that I could understand

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | A Lot of the Time | 2 | 50.0 | 50.0 | 50.0 |
| | Some of the Time | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 5f. Were engaging and interesting

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 1 | 25.0 | 25.0 | 25.0 |
| | A Lot of the Time | 2 | 50.0 | 50.0 | 75.0 |
| | Some of the Time | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 5g. Explained the topics well

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 1 | 25.0 | 25.0 | 25.0 |
| | A Lot of the Time | 3 | 75.0 | 75.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Immersive - Frequencies

### 5h. Had a good balance of reading/listening and hands-on activities

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 1 | 25.0 | 25.0 | 25.0 |
| | A Lot of the Time | 3 | 75.0 | 75.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 5i. Provided enough opportunities to repeat and practice skills

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | A Lot of the Time | 3 | 75.0 | 75.0 | 75.0 |
| | Some of the Time | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 6a. Provided opportunities for me to debrief and discuss topics from the online learning sessions

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 2 | 50.0 | 50.0 | 50.0 |
| | A Lot of the Time | 1 | 25.0 | 25.0 | 75.0 |
| | Some of the Time | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 6b. Talked in a way I could understand

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 2 | 50.0 | 50.0 | 50.0 |
| | A Lot of the Time | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 6c. Was interesting to listen to

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 2 | 50.0 | 50.0 | 50.0 |
| | A Lot of the Time | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Immersive - Frequencies

### 6d. Answered my questions

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 2 | 50.0 | 50.0 | 50.0 |
| | A Lot of the Time | 1 | 25.0 | 25.0 | 75.0 |
| | Some of the Time | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 6e. Helped me feel comfortable with the online learning environment

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 2 | 50.0 | 50.0 | 50.0 |
| | A Lot of the Time | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 6f. Helped me with things I didn't understand

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 2 | 50.0 | 50.0 | 50.0 |
| | A Lot of the Time | 1 | 25.0 | 25.0 | 75.0 |
| | Some of the Time | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 6g. Knew a lot about the knowledge and skills needed to be a composite technician

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 2 | 50.0 | 50.0 | 50.0 |
| | A Lot of the Time | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Immersive - Frequencies

### 7a. Instructions for the Virtual Reality experiences were clear

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 1 | 25.0 | 25.0 | 25.0 |
| | A Lot of the Time | 2 | 50.0 | 50.0 | 75.0 |
| | Some of the Time | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 7b. Closely resembled what I will be doing on the shop floor

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 1 | 25.0 | 25.0 | 25.0 |
| | A Lot of the Time | 2 | 50.0 | 50.0 | 75.0 |
| | Some of the Time | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 7c. Were easy to follow

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 1 | 25.0 | 25.0 | 25.0 |
| | A Lot of the Time | 2 | 50.0 | 50.0 | 75.0 |
| | Some of the Time | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 7d. Were like a ‘real-world’ experience

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 1 | 25.0 | 25.0 | 25.0 |
| | A Lot of the Time | 1 | 25.0 | 25.0 | 50.0 |
| | Some of the Time | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Immersive - Frequencies

### 7e. Were helpful for me in gaining spatial understanding of the tasks

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 1 | 25.0 | 25.0 | 25.0 |
| | A Lot of the Time | 1 | 25.0 | 25.0 | 50.0 |
| | Some of the Time | 1 | 25.0 | 25.0 | 75.0 |
| | Hardly Ever | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 7f. Were engaging and interesting

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 2 | 50.0 | 50.0 | 50.0 |
| | A Lot of the Time | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 7g. Provided enough opportunities to repeat and practice skills

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 1 | 25.0 | 25.0 | 25.0 |
| | A Lot of the Time | 2 | 50.0 | 50.0 | 75.0 |
| | Some of the Time | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 7h. Allowed me to learn from my mistakes

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 1 | 25.0 | 25.0 | 25.0 |
| | A Lot of the Time | 2 | 50.0 | 50.0 | 75.0 |
| | Hardly Ever | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Immersive - Frequencies

### 8. Was your participation in the COAST Composite Technician Training course the first time your ever used Virtual Reality?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes | 3 | 75.0 | 75.0 | 75.0 |
| | No | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 9a. Use a computer (laptop or desktop) for work or other things (e.g. Personal email, social media)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Every Day | 3 | 75.0 | 75.0 | 75.0 |
| | A Few Times a Month | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 9b. Use a tablet for work or other things (e.g. Personal email, social media)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Every Day | 1 | 25.0 | 25.0 | 25.0 |
| | Never | 3 | 75.0 | 75.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 9c. Play video or online games

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Never | 4 | 100.0 | 100.0 | 100.0 |

### 9d. Use a smartphone for gaming

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Never | 4 | 100.0 | 100.0 | 100.0 |

DAIR - Post Immersive - Frequencies

### 9e. Use Virtual Reality for gaming or personal entertainment

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Never | 4 | 100.0 | 100.0 | 100.0 |

### 10a. I received enough information about what to expect in the Virtual Reality experiences of this course

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Agree | 4 | 100.0 | 100.0 | 100.0 |

### 10b. How to use the Virtual Reality technology was clearly explained to me

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Agree | 2 | 50.0 | 50.0 | 50.0 |
| | Disagree | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 10c. I had enough time to try working with the Virtual Reality technology before having to use in the course work

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Agree | 2 | 50.0 | 50.0 | 50.0 |
| | Disagree | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 10d. I felt confident working with the Virtual Reality technology

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Agree | 3 | 75.0 | 75.0 | 75.0 |
| | Disagree | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Immersive - Frequencies

### 10e. Using the Virtual Reality technology made me feel sick (something known as cybersickness)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Agree | 1 | 25.0 | 25.0 | 25.0 |
| | Disagree | 2 | 50.0 | 50.0 | 75.0 |
| | Strongly Disagree | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 10f. Using the Virtual Reality technology made me uncomfortable because I felt 'locked' in an immersive environment

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Agree | 1 | 25.0 | 25.0 | 25.0 |
| | Disagree | 2 | 50.0 | 50.0 | 75.0 |
| | Strongly Disagree | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 10g. I learned a lot from the Virtual Reality experiences

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Agree | 3 | 75.0 | 75.0 | 75.0 |
| | Disagree | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 10h. I think the Virtual Reality experiences helped my learning of the tasks

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Agree | 3 | 75.0 | 75.0 | 75.0 |
| | Disagree | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Immersive - Frequencies

### 10i. I believe that I had a better learning experience because I had Virtual Reality than if I had not had access to these experiences

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Agree | 1 | 25.0 | 25.0 | 25.0 |
| | Agree | 2 | 50.0 | 50.0 | 75.0 |
| | Disagree | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### 10j. I would like to have more Virtual Reality experiences in future aerospace technical training

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Agree | 1 | 25.0 | 25.0 | 25.0 |
| | Agree | 2 | 50.0 | 50.0 | 75.0 |
| | Disagree | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### Overall, I would rate this course as:

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Great | 1 | 25.0 | 25.0 | 25.0 |
| | Good | 3 | 75.0 | 75.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

### I think this course should be offered to others in my workplace:

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes for sure | 2 | 50.0 | 50.0 | 50.0 |
| | Possibly | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Immersive - Frequencies

**I would recommend this course to others in my workplaces:**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes for sure | 2 | 50.0 | 50.0 | 50.0 |
| | Possibly | 2 | 50.0 | 50.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

DAIR - Post Non-Immersive- Frequencies

### 1a. Safety practices of a Composite Technician

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 100.0 | 100.0 | 100.0 |

### 1b. Materials used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 1c. Processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 2 | 66.7 | 66.7 | 66.7 |
| | 4 | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 1d. Specific terms used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 2 | 66.7 | 66.7 | 66.7 |
| | 4 | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 1e. Types of machinery used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

DAIR - Post Non-Immersive- Frequencies

### 1f. Workspace organization requirements for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 100.0 | 100.0 | 100.0 |

### 1g. Mathematics functions required for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 100.0 | 100.0 | 100.0 |

### 1h. How to use the technical data manuals and information needed for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 1i. How to assure quality in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 100.0 | 100.0 | 100.0 |

### 1j. Understanding foreign object debris in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 100.0 | 100.0 | 100.0 |

### 1k. How to use measuring tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |

DAIR - Post Non-Immersive- Frequencies

### 1k. How to use measuring tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| | Total | 3 | 100.0 | 100.0 | |

### 1l. How to use hand tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 1m. How to use power tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 1n. How to use fixtures in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 2 | 66.7 | 66.7 | 66.7 |
| | 4 | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 1o. How to perform key lamination processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

DAIR - Post Non-Immersive- Frequencies

### 1p. How to perform key post lamination processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 1q. How to perform key assembly processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 2a. Safety practices of a Composite Technician

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 100.0 | 100.0 | 100.0 |

### 2b. Materials used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 100.0 | 100.0 | 100.0 |

### 2c. Processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

DAIR - Post Non-Immersive- Frequencies

### 2d. Specific terms used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 2 | 66.7 | 66.7 | 66.7 |
| | 4 | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 2e. Types of machinery used in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 2f. Workspace organization requirements for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 100.0 | 100.0 | 100.0 |

### 2g. Mathematics functions required for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 100.0 | 100.0 | 100.0 |

### 2h. How to use the technical data manuals and information needed for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

DAIR - Post Non-Immersive- Frequencies

### 2i. How to assure quality in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 100.0 | 100.0 | 100.0 |

### 2j. Understanding foreign object debris in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 4 | 3 | 100.0 | 100.0 | 100.0 |

### 2k. How to use measuring tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 2 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 2l. How to use hand tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 2m. How to use power tools in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

DAIR - Post Non-Immersive- Frequencies

### 2n. How to use fixtures in composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 2 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 2o. How to perform key lamination processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 2p. How to perform key post lamination processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 2q. How to perform key assembly processes for composite fabrication

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 3 | 1 | 33.3 | 33.3 | 33.3 |
| | 4 | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

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| | | | |
|---|---|---|---|
| 3. Please tell us if any of these resulted from your participation in this training program. Please check all that apply. | It added to my current skill set | Count | 3 |
| | | Column N % | 100% |
| | It made me more confident in my current job | Count | 2 |
| | | Column N % | 67% |
| | It helped me understand what other opportunities I might have in the aerospace sector | Count | 1 |
| | | Column N % | 33% |
| | It may help me get the job that I want in future | Count | 1 |
| | | Column N % | 33% |
| | It provided me with more knowledge in an area of interest of mine | Count | 1 |
| | | Column N % | 33% |
| | Total | Count | 3 |
| | | Column N % | 100% |

**4. Is this the first time you have taken an aerospace technical training course online?**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes | 3 | 100.0 | 100.0 | 100.0 |

**5a. Taught me new skills involved in the work of a composite technician**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Some of the Time | 3 | 100.0 | 100.0 | 100.0 |

**5b. Taught me skills that I will be able to use in my current job**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | A Lot of the Time | 1 | 33.3 | 33.3 | 33.3 |
| | Some of the Time | 1 | 33.3 | 33.3 | 66.7 |
| | Hardly Ever | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

DAIR - Post Non-Immersive- Frequencies

### 5c. Helped me gain knowledge that will be useful to me in the future

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | A Lot of the Time | 2 | 66.7 | 66.7 | 66.7 |
| | Some of the Time | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 5d. Were easy to follow

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | A Lot of the Time | 3 | 100.0 | 100.0 | 100.0 |

### 5e. Used words and phrases that I could understand

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | A Lot of the Time | 2 | 66.7 | 66.7 | 66.7 |
| | Some of the Time | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 5f. Were engaging and interesting

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | A Lot of the Time | 1 | 33.3 | 33.3 | 33.3 |
| | Some of the Time | 1 | 33.3 | 33.3 | 66.7 |
| | Hardly Ever | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 5g. Explained the topics well

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | A Lot of the Time | 2 | 66.7 | 66.7 | 66.7 |
| | Some of the Time | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

DAIR - Post Non-Immersive- Frequencies

### 5h. Had a good balance of reading/listening and hands-on activities

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | A Lot of the Time | 2 | 66.7 | 66.7 | 66.7 |
| | Some of the Time | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 5i. Provided enough opportunities to repeat and practice skills

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | A Lot of the Time | 2 | 66.7 | 66.7 | 66.7 |
| | Hardly Ever | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 6a. Provided opportunities for me to debrief and discuss topics from the online learning sessions

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 2 | 66.7 | 66.7 | 66.7 |
| | A Lot of the Time | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 6b. Talked in a way I could understand

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 2 | 66.7 | 66.7 | 66.7 |
| | A Lot of the Time | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 6c. Was interesting to listen to

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 2 | 66.7 | 66.7 | 66.7 |
| | A Lot of the Time | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

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### 6d. Answered my questions

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 2 | 66.7 | 66.7 | 66.7 |
| | A Lot of the Time | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 6e. Helped me feel comfortable with the online learning environment

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 2 | 66.7 | 66.7 | 66.7 |
| | A Lot of the Time | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 6f. Helped me with things I didn't understand

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 2 | 66.7 | 66.7 | 66.7 |
| | A Lot of the Time | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

### 6g. Knew a lot about the knowledge and skills needed to be a composite technician

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Always | 3 | 100.0 | 100.0 | 100.0 |

### 7. Would you like to have had an opportunity to access Virtual Reality experiences as part of this course?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes | 2 | 66.7 | 66.7 | 66.7 |
| | No | 1 | 33.3 | 33.3 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |

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| | | | |
|---|---|---|---|
| 8. Why would you have wanted to access Virtual Reality experiences in online aerospace technical training? Please check all that apply. | It would have been interesting and engaging | Count | 2 |
| | | Column N % | 100% |
| | I would have been more able to visualize the processes | Count | 2 |
| | | Column N % | 100% |
| | It would have been a more real-world experience' more like what I do/will do on the shop floor | Count | 1 |
| | | Column N % | 50% |
| | It would have been more hands-on and interactive | Count | 2 |
| | | Column N % | 100% |
| | It would have provided more opportunities to make mistakes and practice | Count | 2 |
| | | Column N % | 100% |
| | I would have been better prepared for what I will be doing on the shop floor | Count | 1 |
| | | Column N % | 50% |
| | It would have been more fun | Count | 2 |
| | | Column N % | 100% |
| | Total | Count | 2 |
| | | Column N % | 100% |

**11. Do you consent to be contacted to do a 30-minute telephone interview about your experience in the Composite Technician Training Program?**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | No | 2 | 66.7 | 100.0 | 100.0 |
| Missing | -1 | 1 | 33.3 | | |
| Total | | 3 | 100.0 | | |

**Overall, I would rate this course as:**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Good | 3 | 100.0 | 100.0 | 100.0 |

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**I think this course should be offered to others in my workplace:**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Possibly | 3 | 100.0 | 100.0 | 100.0 |

**I would recommend this course to others in my workplaces:**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes for sure | 1 | 33.3 | 33.3 | 33.3 |
| | Possibly | 2 | 66.7 | 66.7 | 100.0 |
| | Total | 3 | 100.0 | 100.0 | |