NAST Conference Breakaway Session Feedback Template

**Theme: Innovating Technical Education for a Changing World**

**Engineering Graphics and Design**

Facilitator Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Rapporteur Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Group Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: 01 July 2025

Session Topic (Extension):

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## 1. Aligning Curriculum with Industry Needs

How can technical education align the curriculum with industry's needs?
Please provide practical strategies and planning for improved relevance and responsiveness.

Group Insights & Recommendations:
- Drawings differ from school to industry

Drawings must align more towards industry

Better intervention between DBE and industry/private sector

Is EGD currently addressing the issues in private sector

Specialized more into a general EGD subject

EGD must be seen as a language not an academic subject

We as educators can’t dictate to industry, but industry must tell the academic environment what is the need in industry

CAD should be a prerogative for EGD, but…

Private sector and/or DBE must assist the schools with secured training centers or mobile work CAD stations

Alignment is needed in Power system digital diagrams

## 2. Addressing Teacher Shortages in Specialized Technical Subjects

Specific ideas and suggestions to address teacher shortages in specialized technical subjects.
Consider recruitment, training, and retention strategies based on current realities.

Group Insights & Recommendations:

Exclusive bursaries for technical teacher training

Are we short of teachers or are the problem the recruitment

EGD require a lot of administration that needs to be addressed at school level

Focus should be on artisans and EGD must assist

Bring back the stage to make artisans teachers to be employed and to be offered the opportunity to get skilled in all fields of EGD as a qualified teacher

## 3. Enhancing School-Industry Partnerships

How can technical schools participate in and benefit from school-industry partnerships?
Include workplace exposure opportunities for learners.

Group Insights & Recommendations:
 PED must reach out to private sector to see who are able to assist in taking up learners in the community

Droughting must be come compulsory

Community service is compulsory to industry. Schools must use the opportunity to become involved in industry

Schools can use Article 18A for NPO Non- Profitable Organization and become involved with industry

Members in the school community also can be used as contact persons for schools in industry

## 4. Gaining Recognition as Special-Focus Schools

How can technical schools gain greater recognition as special-focus schools?
Explore branding, policy, and community engagement approaches.

Group Insights & Recommendations:

* Get online visibility
* Learners gaining practical can get visible recognition
* Get learner products advertised on the school web
* Have exhibitions at the school showcasing learner products
* Getting rid of the stigma that is along with technical training
* More competitions between technical schools and academic schools
* Technical subjects should also be part of enrichment classes

## 5. Integrating eLearning in Practical Subjects

Will the integration of eLearning platforms in practical subjects be effective?
How can we prepare for this future-oriented shift? Identify tools, training needs, and implementation steps.

Group Insights & Recommendations:

* E-submission of assignments can solve a problem (during coved) in near future
* Teaching in CAD is the future and must be addressed at all cost
* Must be introduced to BIM (Building Information Modeling)
* Must work towards 2D, 3D, 4D, up to 7D design
* Design in CAD must become a prerogative
* Printing (3D Printing) - Modeling of the final product is the way to communicate the final product to the receiver

## Summary of Group Feedback

Top 3 Recommendations:

* CAD is definitely important for the future
* Can work on phones/tablets
* Devices/training services can also be offered for technical learners as for the case to academic learners

Challenges Identified:

* Security
* Costs of devices
* Budget constraints

Proposals Worth Scaling or Piloting:

* EGD tutorials
* EGD App
* Shared database on a common platform