

**I CERTIFY THAT ALL SEMESTER 1 5S OUTCOMES HAVE BEEN COM-
PLETED:**

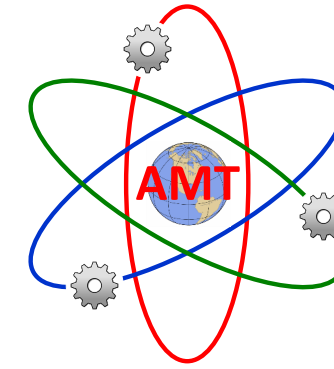
DATE

SIGNATURE

AMT Leader

TOYOTA

Advanced Manufacturing Technician



Manufacturing Core Exercises

MCE 2: 5S

Workplace Visual Control

STAFF GUIDE

5S Process

PROCESS

1. Set a date and conduct 5S training.
2. Meet with the school faculty and plan the semester action plan for accomplishing the MCE. Organize resources and responsibilities.
3. Meet with the AMTs, distribute materials, and give direction on what is to be done and how to go about accomplishing the MCE.
4. Assist the AMTs in determining a 5S project(s). The class can do one overall project, or can divide and do multiple projects. Ideally, the project should allow the performance of every step of 5S so that students have hands-on experience with all phases.
5. Advise AMTs on each 5S step. Be sure to reinforce the elements and benefits of each step.
6. Track MCE (recommended, through MQS) to ensure that class maintains progress is complete on time.
7. Include MCE status in monthly AMT meetings with faculty.
8. Arrange and conduct appropriate presentations as projects are completed.
9. Coordinate with NAPSC and arrange for end-of-semester AMT presentations as part of regional review.

MATERIALS NEEDED

- ◇ 5S board (large white board recommended).
- ◇ 5S Walk-Through forms.
- ◇ Other materials will be dependent on the 5S project chosen.

5S Essay: 5S at Work

You have completed your 5S “Workplace Visual Organization” Exercise Outcomes. You have also participated in activities both at work and at school regarding 5S. As your understanding of 5S has increased you should have begun seeing your workplace in the company in a different light. This essay will reflect on whether or not you think that your workplace exhibits good 5S practice.

Your assignment is to write an essay discussing the 5S condition of your workplace.

Another goal of the essay is to give you the opportunity to develop your good writing skills, both in using effective writing basics such as grammar, structure, and spelling, and in effectively communicating a message.

Guidelines:

- Length: 1-3 pages.
- Content: Items to consider include whether your workplace practices 5S at all. If so, what are the best practices of 5S in your workplace? In what ways can 5S be improved in your workplace? How is the business efficiency of your workplace affected—good or bad—by the practice of 5S. How can you take personal initiative to become an active improvement agent in your workplace? There is much more that can be included.
- This essay does not need to be foot-noted unless your writing needs it. Use any accepted writing standard or structure that you wish, but be sure to use correct practices and techniques.
- Write in any medium that you wish (paper, computer, etc.) The final product should be in electronic form so that it can be both e-mailed and saved as a file. It should be in a form that can easily be converted to Microsoft Word.
- Double check spelling!
- Print a copy of your final product.
- E-mail your file to the following parties:
 - ◇ AMT Leader: _____ (e-mail address)
 - ◇ School AMT Coordinator: _____ (e-mail address)
 - ◇ North American Toyota AMT Regional Assistant: jim.mattingly@tema.toyota.com
 - ◇ Additional parties as directed: _____ (e-mail address)

DUE DATE

5S Essay: TPS TOOL

You have completed your 5S “Workplace Visual Organization” Exercise Outcomes. You have also participated in activities both at work and at school regarding 5S. You should be a different person than you were a few months ago.

5S is considered to be “The First Tool of TPS.” It is the first and the most universal way in which we put TPS to work. All team members—Production, Skilled Maintenance, Office & Professional, and Management—should practice 5S as part of their intentional practice of TPS.

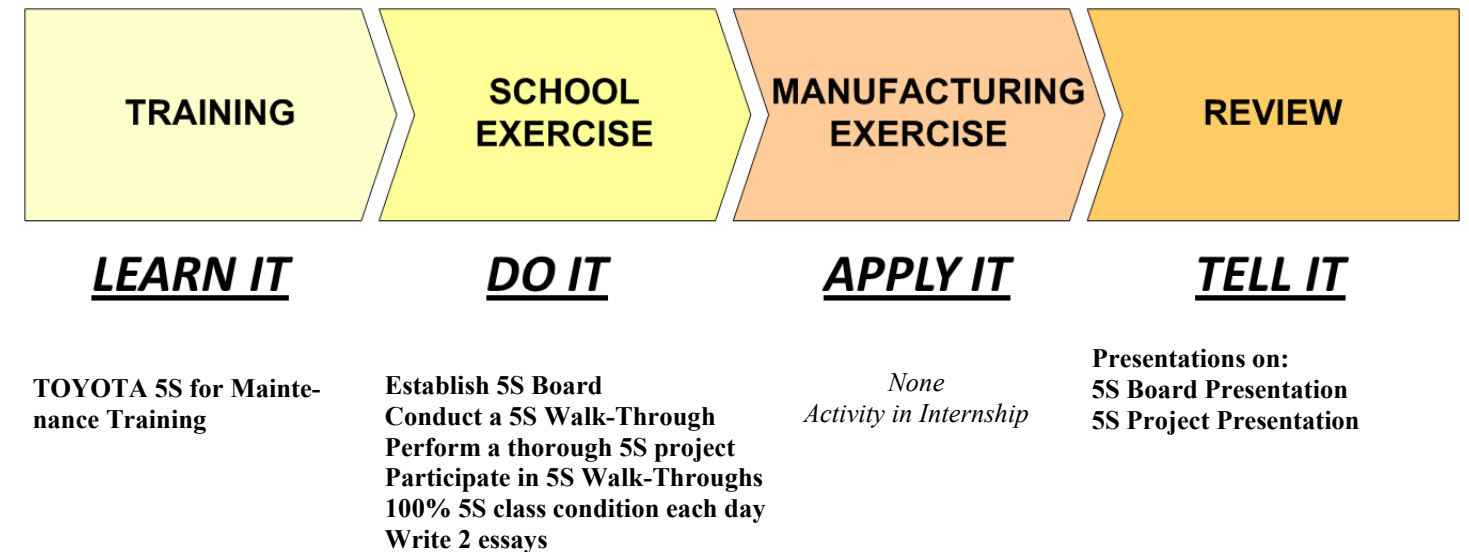
Your assignment is to write an essay discussing the connection of 5S to TPS. Another goal of the essay is to give you the opportunity to develop your good writing skills, both in using effective writing basics such as grammar, structure, and spelling, and in effectively communicating a message.

Guidelines:

- Length: 1-3 pages.
- Content: How does each element of 5S support TPS? Which elements of TPS are most impacted by the practice of 5S? How does 5S promote the achievement of Jidoka? How does 5S promote the achievement of Just-in-Time? Does 5S support Heijunka? Does 5S impact the key Customer First elements of Highest Quality, Lowest Cost, and Shortest Lead Time? These are just thought starters. There is much more that can be included.
- This essay does not need to be foot-noted unless your writing needs it. Use any accepted writing standard or structure that you wish, but be sure to use correct practices and techniques.
- Write in any medium that you wish (paper, computer, etc.) The final product should be in electronic form so that it can be both e-mailed and saved as a file. It should be in a form that can easily be converted to Microsoft Word.
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DUE DATE

5S Overview



5S Notes

- AMTs should plan on staying at least 2 hours after class on every school day.
- Always coordinate with the College Partner to ensure that someone is leading the AMTs.
- 5S activities are led mostly by the school staff, however, company should give much support.
- The AMT Leader should participate as much as possible, especially at reviews.
- This is a very hands-on activity. Be sure to teach and reinforce 5S principles through the activities.
- For new programs, first projects will be targeted toward establishing the initial 5S condition in the Advanced Manufacturing Center. Later projects will focus on expanding 5S practice or improving existing 5S practice.
- Be sure that AMTs maintain/sustain all previous 5S standards set on the floor. We lost the 5th S if we do not learn to sustain what is in place.
- Company and school need to carefully consider each proposed 5S project and agree to any cost and/or material needs.

DATE	CLASS	100% /	UNSAT x	NOTES

5S Basics

STATE EACH 5S (ENGLISH) FROM MEMORY IN ORDER AND WITHOUT ERROR 3 CONSECUTIVE TIMES (3 DIFFERENT DAYS):

DATE

EFFECTIVELY DISCUSS EACH ELEMENT OF 5S.

DATE

DESCRIBE THE WORKPLACE BENEFIT OF EACH ELEMENT OF 5S.

DATE

AMTs should be issued the core PPT handout which covers in detail the 5S steps, how to implement each step, the benefits of each step, and good visuals. AMTs should be encouraged to keep this hand-out with them throughout the whole semester and to continue to study and absorb it on a daily basis.

Faculty and company reps should quiz and check the knowledge of the AMTs on 5S, as presented in the hand-out, on a regular basis. Refer answers back to the hand-out.

Be sure to point out as much as possible applications of 5S and then to tie those to the tangible working and business benefits.

5S WALK THROUGHS

GROUP 5S WALK THROUGHS:

DATE

YOUR CONTRIBUTION

5S WALK THROUGH

Developing Your Eye for 5S

RECEIVE INSTRUCTION ON CONDUCTING A 5S WALK THROUGH:

Also receive your form for conducting the walk through.

DATE

5S WALK THROUGH COMPLETED

DATE

Keep your Safety Walk Through with this Work Book

COMPANY WALK THROUGH COMPLETED

DATE

WHO COMPLETED THE WALK THROUGH

5S IMPROVEMENT PRESENTATION:

DATE

REVIEWERS AT THE PRESENTATION

NAME

TITLE

Be sure to ask deep questions to both probe AMTs knowledge and grasp of the material as well as to provide coaching to AMTs.

This is a prime opportunity to coach AMTs. Make this review a significant teaching moment. Before the review ask all visiting participants to be active in teaching and coaching during the review.

5S +IMPROVEMENT FEEDBACK:

Write feedback that you receive on your safety improvement

5S PROJECT

WALK THROUGH COMPARISON

Discuss (write) differences in your Walk Through and the Company Walk Through

5S IMPROVEMENT IDENTIFIED:

BEFORE/AFTER PHOTOS OF SCHOOL 5S IMPROVEMENT

Choosing the right 5S project is a critical task. Guidelines include:

- The 5S project should be as substantial as possible while still being able to be completed within the available time frame.
- It should give the AMT the opportunity to meaningfully engage in all 5 steps.
- It should be a real project that will be sustained over time to improve the AMC.
- It can be a new project (where no 5S condition exists), or it can be an improvement to an existing 5S condition.
- There can be one project for the whole class, or there can be multiple projects for multiple groups within the class.

Note that the company walk-through only has to be done one time. It is compared to all of the AMT walk-throughs. The company walk-through should be done before the AMT activity so that they AMTs do not see what the company rep identifies. The company walk-through also needs to be done as close to (in time) the AMT walk-through as possible so that conditions don't change and make the comparison less valid. The company walk-through should be very thorough: 1) It helps to teach the AMTs, 2) it should have items that that AMTs have missed, thus helping them to improve their eye.

All of the can do their individual walk-throughs at the same time, but they should be instructed to not collaborate with one another so that they are truly using their own eye and judgment. Be sure to emphasize that one student's results are not going to be compared to another. They should to their individual best, and then should use the work and results to improve their eye for safety.

HOW HAS YOUR 5S EYE CHANGED?