
Leading Development of Skilled Workers: Transforming Unskilled Labor to Skilled Craft Labor in the Pulp and Paper Manufacturing Industry

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Transforming Unskilled Labor to Skilled Craft Labor in the Pulp and Paper Manufacturing Industry

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Abstract

The demand for entry level skilled trades workers in the pulp and paper industry has far outnumbered the supply of workers currently available in the United States. Many pulp and paper manufactures have dozens or even hundreds of unfilled high paying jobs with great benefits currently available. Concurrently to this, an available workforce of unskilled workers with little to no formal technical training remains available. These unskilled workers are frequently working in lower wage jobs with poor benefits that offer very little opportunity for advancement. This research explores and attempts to identify what is the best practices that can be used to develop unskilled workers into entry level skilled trades workers in the pulp and paper industry.

Research Questions

- 1) **What are the best practices that pulp and paper manufacturing firms can utilize to develop unskilled workers into skilled craft workers?**
- 2) **What is the time, money and resources required for pulp and paper manufacturing firms to train unskilled workers to skilled craft workers?**

Methods

Qualitative grounded theory methods were used through an interview process of gathering personal experience from 9 individuals with 10+ years of leadership experience in the pulp and paper industry.

Figure 1. Significant Themes

Significant Theme Summary	Group
There is currently a lack of skilled workers available to be hired but there is a good pool of unskilled workers available to hire.	1
Formal apprenticeship programs have been obsoleted at most pulp and paper organizations, and it is not feasible to try reinstating them.	2
There is a need for specific pulp and paper industry training, many skilled workers hired have skills and training related to their profession but do not have an understanding about the industry equipment.	3
A very effective method of training unskilled workers to become skilled workers is peer to peer, hands on, on the job training with a combination of formal Skill's training	4
It is hard to accurately identify cost and duration to develop unskilled workers to skilled workers without additional significant research.	5
Need a process to identify work ethic and correct personalities as step one before hiring unskilled workers to become skilled workers	6



Figure 2. Participants Demographics (ungrouped)

Years working	Industry	Current Position Titles	State Work Location
30 Years		Mill Maintenance and Engineering Manger	South Carolina
42 Years		Mill Reliability Manager	Maine
18 Years		Corporate Reliability Engineer	Maine
11 Years		Retired, Pulp Mill Maintenance Manager	Florida
16 Years		Corporate Reliability Engineer	Georgia
22 Years		Mill Electrical Maintenance Manager	Alabama
19 Years		Senior Reliability Engineer	Maine
39 Years		Pulp Mill Maintenance Manager	Maine
17 Years		Mill Maintenance and Engineering Manger	Georgia
Total Years: 214 Years			

Results

Transcribed participant interviews resulted in over sixteen thousand words of data. This data was initially organized into 26 simple themes. Coding analysis was then used in Microsoft Excel for these themes via a process of a numbering system to group the simple themes into similar categories. This coding and grouping process yielded 5 significant themes relevant to the research questions. Also identified, based on interview feedback from the participants, was a significant theme not originally considered by the researcher but relevant to the potential contributions of the research. See figure 1. which summarizes each them.

Discussion/Conclusions

The primary purpose of this study was to explore what best practices should be used to to develop unskilled workers into skilled craft workers in the pulp and paper industry. The study utilized existing research to understand findings and theories already developed on the topic. The findings of the research effectively answered question one with meaningful and effective data. Question two was answered in part but also gaps were identified that highlight opportunities for additional research using alternative methods. The problem of there being a lack of skilled craft workers was unanimously agreed upon by all the interview participants. Skilled workers cannot be recruited by appealing wages and benefits alone because the fact is there is not a significant quantity available to fill the current and future openings in the pulp and paper industry. These findings were also in align with the literature and references that were reviewed. What is unanswered from this study and the existing literature that was reviewed was a reasonably accurate definition of what the cost and duration is needed to develop unskilled workers. Future quantitative research should be considered with an appropriate sample size. The burden of a lack of available skilled craft workers could be lifted from organizations and the existing skilled craft workers that are on the verge of burnout. Also, unskilled workers that may feel they are stuck in an unescapable rut can realize success as well. Perhaps they can be lifted from an uncertain future of potentially low wages and poor benefits. They can realize rewards of their hard work with high percental wages and benefits that leaves them with fulfillment and pride of the skills they have obtained and the work they are now able to complete.

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