Abstracts

Current Issues Related to Intergenerational Skill Transmission
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Society has utilized several institutions to cultivate, preserve, and transmit skills in the economy. In this article, we first propose several topics on intergenerational skill transmission by summarizing previous literature in economics. Second, we tentatively analyze how Japanese employers have become conscious of skill transmission in firms, by merging two governmental statistics: the Basic Survey of Human Resources Development and the Basic Survey on Wage Structure. Our findings are summarized as follows. First, while Japanese employers became conscious of skill transmission just before the baby boomers started to retire in 2007, the problem of intergenerational skill transmission has not yet been fully solved even after the baby boomers have completely retired. Intergenerational skill transmission may be one aspect of a more structural issue in labor markets that is related to general human capital accumulation within firms. Second, the economic literature has not directly analyzed intergenerational skill transmission within firms. The literature on economic growth theory and contract theory may share the same motivation as researches on intergenerational skill transmission. Third, based on matching data between training and wages, our estimations imply that the steepness of the wage-tenure profile for long-tenured workers is statistically associated with the employer's consciousness of skill transmission. Also, the wage premium for university graduates may reduce consciousness of skill transmission.

Characteristics of Skilled Techniques and Issues in Transmission to the Next Generation and Training
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The transmission of skilled techniques to the next generation has been an important issue in all historical periods. I extracted the characteristics of skills that should be passed down, and examined issues related to passing down these skills. Interviews with experts revealed that these characteristics were organized into the way of thinking about work and work results, behavior patterns, and the work concept, which combined with the other two characteristics to describe the behavior of the expert. When a skilled worker works, the things to keep in mind are high performance, the establishment of an execution plan, and the avoidance of problems and accidents as well as the maintenance of safety. The work concept represents an important aspect of doing work. It is composed of the concept of the field（environment）, the concept of the goal, the concept of action（motion）, and the concept of means and time. Furthermore, the characteristics of skilled techniques according to the form of work were considered, and specifically, the differences in skills between service labor and manufacturing labor as well as the differences in skills between production methods were clarified. Next, the difficulty of passing down technology and skills to the next generation was clarified, and ways of thinking about solutions were arranged in seven points.

Practical Skills of Expert Business Managers and the Problems of its Successions
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This paper discusses the practical skills of expert business managers and problems underlying in successions on these skills to young generations from psychological and management study viewpoint, as well as on the basis of the results from two surveys. First, expert business managers' practical skills were defined as knowledge acquired informally through workplace experience based on the interaction between tacit and explicit knowledge. Second, the process of acquiring practical skills was broken down into four steps（novice, advanced-beginner, competent, and expert）, and plateaus were evident at the barrier of proceeding to the next step. Furthermore, data from Survey 1（N=380）revealed that unlearning advances in company employees' expertise level in line with the number of years of experience and along with the advancement of

practical skills. In addition to personal experience, workers often learn from others who serve as a resource for experiential learning. Third, problems and solutions for transforming tacit knowledge to explicit knowledge in the succession of practical skills were also discussed. Lastly, based on data from Survey 2 (N=688), the problems incurred in succeeding practical skills when introducing artificial intelligence (AI) to the workplace were considered. This highlighted that while employees expected decreases in errors and improved efficiency in collaborating with AI, they were concerned that being replaced by AI in handling their tasks would result in a decline in their practical skills, satisfaction, and opportunities at work.

Enhancing the Creation, Sharing, and Transfer of Practical Intelligence in Communities of Practice

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This paper discusses mechanisms for creating, sharing, and transferring practical intelligence enhanced by communities of practice (CoPs). CoPs are defined as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" （Wenger, McDermott, & Snyder, 2002, p. 4）. We suggest two learning mechanisms of CoPs: one derived from the difference between organizational canonical and non-canonical views in CoPs, and the other facilitated by boundary crossing. We also suggest four styles of learning that are enhanced to create practical intelligence: mastery learning, boundary-crossing learning, circular learning, and multifaceted learning. We then claim that we should distinguish two types of CoPs, and to connect them to build a multi-layered structure of advanced CoPs. We discuss how communities of practice enhance the creation of practical intelligence by using four case studies of CoPs, and claim that CoPs enhance the creation, sharing, and transfer of practical intelligence in each case. Finally, some further suggestions are proposed.