



*Research Paper*

## Exploring and Developing the Ethical Codes for Work and Technology Curriculum

Mehdi Maleki<sup>1</sup>, Mohammad Javad Liaghatdar<sup>2\*</sup>, Mohammad Reza Nili<sup>3</sup>

1. PhD in Curriculum Development, Department of Educational Sciences, Isfahan University, Isfahan, Iran. maleki@edu.ui.ac.ir
2. Corresponding author: Professor of Curriculum Development, Department of Educational Sciences, Isfahan University, Isfahan, Iran. javad@edu.ui.ac.ir
3. Associate Professor of Curriculum Development, Department of Educational Sciences, Isfahan University, Isfahan, Iran. m.nili.a@edu.ui.ac.ir

Received: 2019-12-08

Accepted: 2021-12-03

### Abstract

**Aim:** The present study aims to explore and develop the ethical codes for the work and technology curriculum of the junior high school from the teachers' point of view. This qualitative research used phenomenological methodology. The findings showed that teachers identify two main categories and twelve subcategories for work and technology curriculum ethical codes: work ethical codes of responsibility, fairness, honesty and integrity, trustworthiness and halal earning, and technology ethical codes of intellectual property, copyright, information security, privacy, access, information accuracy and networking etiquette).

**Keywords:** Curriculum, Ethics, Technology, Work

### Introduction

Ethical codes determine ethical do's and don'ts in any profession, and provide individuals with a common understanding (Gharamaleki, 2017). As one of the eleven domains of education and learning in the national curriculum, work and technology curriculum inevitably involves ethical issues. Since this curriculum focuses on obtaining practical skills for an

efficient productive life and competencies relating to the relevant technologies, particularly information and communication technology, we have two main concepts: professional or occupational training and technology training. Review of the literature reveals the following published research in this regard: Ayati et al. (2019), Aghili et al. (2019), Maleki et al. (2019), Farmahinifrahani et al. (2014), Bourke et al. (2020), Bleazby et al. (2020), Daccache (2019), Nishino (2017), and Segev (2016). Since curriculum provides the path for realization and practice of ethical issues, work and technology curriculum has an important place in the development of students' skills in the modern world for its key concepts of work and technology, and that students should have a greater commitment and adherence to ethical issues, the present study was conducted to explore and develop ethical codes for the work and technology curriculum and answer the question of "What are the ethical codes for work and technology curriculum from the teachers' perspective?"

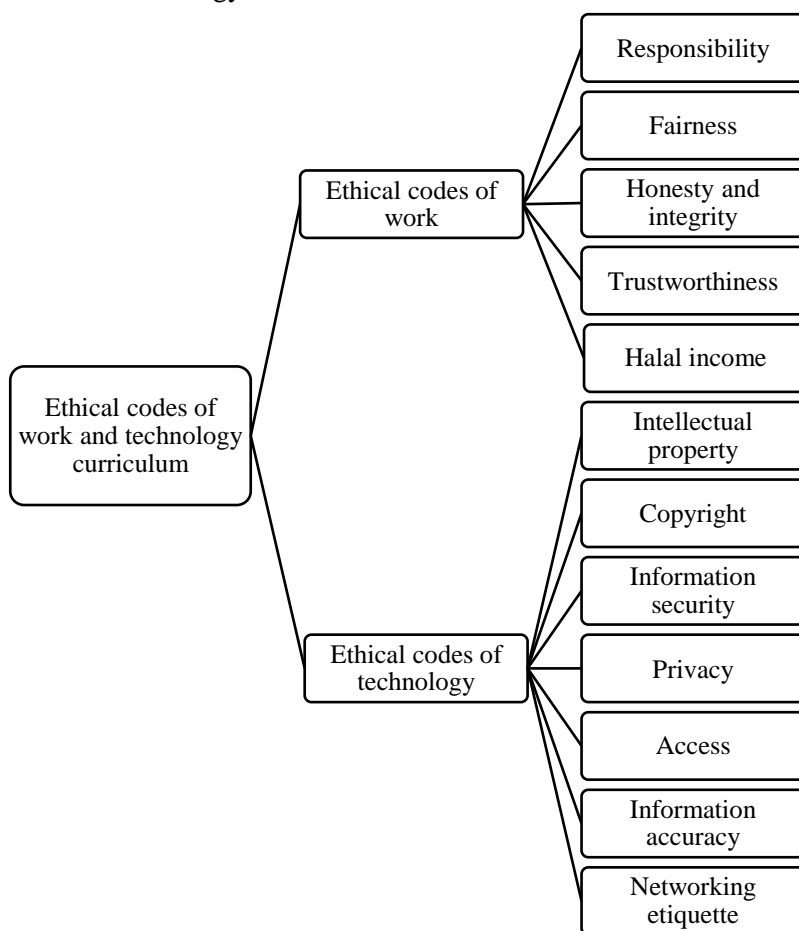
## **Methodology**

Given the nature of the study subject, the present study was conducted using a qualitative phenomenological approach. The statistical population included teachers of work and technology from across the country. Purposive sampling was conducted using criterion strategy. With prior arrangements made with the Office of Compilation of Technical and Vocational Textbooks, 13 head teachers (10 men and 3 women) were interviewed until data saturation. After selecting the participants, data were collected using semi-structured interviews. Concerns about lack of time to interview the participants were abated through prior arrangements. Each interview lasted 50-70 minutes. Face validity and content validity of the interview questions were confirmed by several professors of educational sciences. To determine the validity of the data, strategies such as member check and peer check were used. Member check and peer check were used to ensure that the interpretation of the data reflected the study phenomenon, such that the data were encoded by three researchers familiar with the qualitative studies after transcribing the interviews, and their comments were implemented and completely approved. Next, for the purpose of member check, the findings and codes extracted from interviews were given to four participants for their approval. An external observer with expertise in qualitative studies and qualitative data analysis was used to ensure dependability of the study.

## Results

**Question:** What are the ethical codes for work and technology curriculum from the teachers' perspective?

According to the results, the ethical codes for work and technology curriculum from the teachers' perspective include two main items: ethical codes of work (responsibility, fairness, honesty and integrity, trustworthiness and halal income), and ethical codes of technology (intellectual property, copyright, information security, privacy, access, information accuracy and networking etiquette), as explained below. Figure 1 shows the ethical codes of work and technology.



**Figure 1:** Ethical codes of work and technology

## Discussion and conclusion

The presence of ethics together with reason, faith, science and practice in the national curriculum targeting model reflects that ethical issues are valued and seriously addressed for helping students achieve some degrees of basic competencies. With regard to the ethical codes of work, our results generally concur with those obtained in the following studies: Mirkamali and Haj Khazimeh (2016) in terms of the components of honesty, fairness, and responsibility; Sayyadi, Tooranloo, Saghafi (2017) in terms of the Islamic work ethics consequences in the social field; Maleki et al. (2019) in terms of work and technology ethical skills; Bleazby (2020) in terms of ethical habits and values (honesty and care); Mason (1986) in terms of the ethical codes of technology such as privacy, access and accuracy; Rasinan (2003) in the dimension of social/conscious/ethical thinking; Akay study (2008) in terms of ethical issues such as privacy, assets, copyrights, networking etiquette, access and accuracy, and Lucey and Grant study (2009) in terms of privacy, and accessibility.

## Acknowledgements

We are obliged to all individuals contributing to the study, including the authors and experts of the technical and professional textbook compilation office, especially the work and technology teachers and the head teachers.

## Reference

- Aghili, S., Alomalhoda, Fathi Vajargah, K. (2019). Examining the dominant principles in the Designing of the appropriate Model for moral Education in the Elementary Period of the Iranian Educational System. *Journal of Educational Sciences*, 26(1), 15-34.
- Akay, B. (2008). The relationship between technology and ethics: From society to schools. *Turkish Online Journal of Distance Education*, 9(4), 120-127.
- Ayati, M. Ghorani sirjani, S. Gholampour, M. (2019). Explaining the Elements of Moral Education Curriculum for Primary School Students based on Humanistic Psychology. *Bioethics Journal*, spring. 9 (31).47-61.
- Bleazby, J. (2020). Fostering moral understanding, moral inquiry & moral habits through philosophy in schools: a Dewey Ian analysis of Australia's Ethical Understanding curriculum. *Journal of Curriculum Studies*, 52(1), 84-100.
- Bourke, M., Kinsella, W., & Prendeville, P. (2020). The Implementation of an Ethical Education Curriculum in Secondary Schools in Ireland. *Education Sciences*, 10(1), 14.
- Daccache, J. (2019). Examining the Relationship between Educational Technology and Morality: A Case Study of an American Catholic Middle School.

- Farmahinifarahani, M., Maleki, M., & Allaf, A. F. (2014). Identify and develop components of student ethical codes. *The journal of Ethics in Science & Technology*, 9(3), 68-79.
- Gharamaleki, A, F. (2017). Professional ethics, Majnoon Publications, Tehran.
- Lucey, T. A., & Grant, M. M. (2009). Ethical issues in instructional technology: An exploratory framework. *Multicultural Education & Technology Journal*, 3(3), 196-212.
- Maleki, M., Liaghatdar, M., Nili, M. (2020). Phenomenological study of determining the basic skills of work and technology curriculum. *Technology of Education Journal (TEJ)*, 14(2), 369-381.
- Mason, R. O. (1986). Four ethical issues of the information age. *Mis Quarterly*, 5-12.
- Mirkamali, S., Hajkhozeime, M. (2016). Design Patterns the Professional Ethics of Elementary School Teachers: Case Study of Government boys' Primary School Teachers in Tehran. *Educational and Scholastic studies*, 5(1), 9-30.
- Nishino, M. (2017). The challenge of developing meaningful curriculum initiatives for moral education in Japan. *Journal of Moral Education*, 46(1), 46-57.
- Rasinen, A. (2003). An Analysis of the Technology Education Curriculum of Six Countries. *Journal of Technology Education*, 15(1), 31-47.
- Sayyadi Tooranloo, H., Saghafi, S. (2017). The Outcomes of the Islamic Work Ethic. *Journal of Islamic Management*, 25(4), 175-202.
- Segev, A. (2016). Does classic school curriculum contribute to morality? Integrating school curriculum with moral and intellectual education. *Educational Philosophy and Theory*, 1-10.