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Selection processes in a Delphi study about key qualifications in Senior Secondary Vocational Education

Simone J. van Zolingen^{a,*}, Cees A. Klaassen^b

^a*Nijmegen School of Management, University of Nijmegen, PO Box 9108, 6500 HK Nijmegen, The Netherlands*

^b*Department of Education, University of Nijmegen, PO Box 9108, 6500 HK Nijmegen, The Netherlands*

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Abstract

The focus of this study is the Delphi method. First, a short history of the Delphi method is given. Then, different types of the Delphi method are described, and the validity and reliability of the Delphi method are discussed. Finally, this study reports on the selection processes and assessments faced when a policy Delphi was conducted into qualification issues in Senior Secondary Vocational Education in the Netherlands.

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1. Introduction

Delphi, the holy city on the slope of Parnassos, is not only known for the temple of Apollo, where the oracle forecasts the future. During the last few decades—at least with researchers—Delphi has become well-known again for the research method named after it, which, as a qualitative, long-range forecasting technique, elicits, refines and draws upon the collective opinion and expertise of a panel of experts. Unlike in Ancient Greece, it is no longer an oracle that is consulted, but a team of experts. Just as with oracles, consulting key informants calls for a careful and well-considered approach. This contribution will report on the selection

* Corresponding author. Tel.: +31-361-6252; fax: +31-24-361-1933.

E-mail address: s.vanzolingen@nsm.kun.nl (S.J. van Zolingen).

processes and assessments that we had to face when we conducted a Delphi study into qualification issues in vocational education.

The Delphi method was developed in the fifties in the context of defense research. This was done at ‘Rand Corporation’ in the United States. Dalkey and Helmer [1] were looking for a method to obtain a reliable consensus about the opinions of various defense experts on the effects of a possible big nuclear attack. With the help of this new method, they sought to maintain control of certain group processes. Thus, they tried to eliminate specific factors such as:

- the tendency of low status group members ‘to go along with’ the opinion of group members with a higher status;
- the tendency of a group to exert pressure on its members to conform;
- the tendency of a dominant group member to exert undue influence on the opinion of the group.

Linstone and Turoff [2] defined the Delphi method as “a method for structuring a group communication problem” (p. 3). The Delphi method consists of experts’ judgement by means of successive iterations of a given questionnaire, to show convergence of opinions and to identify dissent or nonconvergence. Each iteration constitutes a round, and the questionnaire is the medium for the experts to interact. The Delphi method is considered especially useful for long-range aspects (20–30 years) as expert opinions are the only source of information available. The main advantage of this method is that panel members can shift position without losing face if they see convincing reasons for doing so [3].

In the sixties and early seventies, the Delphi method was widely applied. This is exemplified by research into forecasts of future developments in science and technology and how they affect society [4]. In a study into 800 Delphi method applications, Brockhaus and Michelsen [5] found that in that period, the method was most applied in science. In addition to the original form of the Delphi method, i.e. the ‘classical’ Delphi aimed at obtaining stability in responses among the experts on a specific issue (i.e. where there has been no change in the group’s response to an issue from one iteration to the next), a new type of Delphi emerged in the seventies [6]. The latter focusses on formulating goals and indicating priorities in, for example, policy programmes and participation or budgeting programmes. This latter type of Delphi—the ‘policy’ Delphi—has substantially widened the method’s range of application. It has now become an instrument for policy development. It is not aimed at obtaining stability in responses among experts, but, on the contrary, clarification of divergent views and elucidation of arguments are the central elements of this type of Delphi [7]. Beside the ‘classical’ and the ‘policy’ Delphi, still other types have been developed [8,9] and are still being developed [10,11]. In a more recent review of 463 papers concerning the Delphi method, Gupta and Clarke [12] mention a very broad application of the Delphi method in business, education, health care, real estate, engineering, environment, social science, tourism and transportations. The widespread use of the Delphi method today in national foresight projects clearly is designed to serve as a communication process to increase awareness among government planners and policymakers of the future environment

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