

TEACHER EDUCATION FOR SCHOOL TECHNOLOGY

CONTENTS

Page

Preface 9

OPENING SESSION

The importance of school technology for industry - prof.ir.
 M. Kuilman 11
 Teacher education for school technology - prof.dr. J.H. Raat 18

THEME 1. FRAMEWORKS FOR TECHNOLOGY TEACHER EDUCATION

Introduction to theme 1: frameworks for technology teacher
 education - dr. M.J. de Vries 25
 The educational system of Greece and 'SELETE' (the technical
 and vocational teacher training college - prof.dr. S.
 Androulidakis 32
 Some applications of the concept of general technology -
 prof.dr. H. Arp 45
 The education of teachers of school technology in Nigeria:
 programme, problem and prospect - prof.dr. T.A. Balogun 57
 Technology Education program Virginia Polytechnic Institute
 & State University - dr. E.A. Bame, dr. W.E. Dugger, Jr., dr. J.E.
 Laporte, dr. C. Pinder, dr. M. Sanders 74
 Transitioning from Industrial Education to Technology
 Education: the Eastern Michigan University experience -
 dr. J.L. Barnes 92
 A curricular framework for technology teacher training and
 education - R.J. Booth 107
 From techne to automation. A hypothesis on technical evolution
 - J. Deri 121
 Some remarks on teachers training for Technology Education
 in Poland - G. Dudziak, prof.dr.hab. H. Szydowski 128
 Technology Education in New Zealand - D. Ferguson 135
 Technology Education INSET: the Oxford experience - J.S.
 Fisher, L. Endean 146
 Characteristics of technology teacher training in Poland -
 M. Frejman, prof.dr.hab. H. Szydowski 160
 Canadian Technology Education patterns - dr. G.J. Hache 168
 Teacher Education for physics and technology in Hungary -
 prof.dr. F.J. Kedves, L. Gergely, S. Kiss 177

Systems approach for Technology Education (a curriculum delivery system) - dr. M.R. Kozak	187
Curriculum content alignment between academic and vocational education - dr. Ph. Miller	198
Teacher training at the Pedagogical Technological College - ir. J.M.A. Niekamp	206
Environmental education in African countries: the Kenyan case as an example - F.O. Otieno	213
Teacher training for technology in the UK - dr. R.L. Page	225
Teacher education for school technology at the Dutch Pedagogical Technological College - ir. H. Peters, H. Verhoeven, dr. M.J. de Vries	238
Training teachers in labour-polytechnical education in The Peoples Republic of Bulgaria - prof. P. Petrov	243
Teacher education for school technology: the Indian scene - prof.dr. J.S. Rajput	252
Utilisation of educational TV programmes in India - prof.dr. J.S. Rajput	259
Teacher training for school technology in the Estonian SSR - A. Saar, H. Tombu	266
Summary of theme 1 - dr. M.J. de Vries	274

THEME 2. PATT RESEARCH

Technology Teacher Education & PATT Research: Observations, Challenges & Issues - dr. M.J. Dyrenfurth	279
The PATT-project, an overview of an international research project in technology education - drs. F. de Klerk Wolters	290
Pupils' Attitude Towards Technology: PATT-USA - dr. E.A. Bame, dr. W.E. Dugger, Jr.	309
What do American teachers think of technology - dr. E.A. Bame	320
A PATT-study among 10 to 12-year-olds - drs. F. de Klerk Wolters	324
Summary of theme 2 - drs. F. de Klerk Wolters	331

THEME 3. WOMEN IN TECHNOLOGY TEACHER EDUCATION

Women in technology education - dr. C.C. Selby	335
Guidelines to make technology attractive to girls: experiences of the MENT-project - drs. M. Brand, drs. L. Roelofs	343

How do teachers in technical colleges think about girls - drs. M. Groenendaal, drs. L. Marinussen	354
Attitude towards computers of girls aged 10-12 years - D. Klopper, Y Schleyper	362
Opportunities for women in technical teacher training - dr. I. Mottier	366
More female teachers in electrical engineering education - drs. J. Stakenborg	375
Summary of theme 3 - dr. I. Mottier	378

THEME 4. TEACHER EDUCATION FOR PRIMARY SCHOOL TECHNOLOGY

Training teachers of technology for grades 1-6 and technological education in the educational system in the GDR - prof.dr.sc.paed. D. Blandow	383
Computer literacy of teachers and students: a key component of their technological training - M. Atanassova	402
An overview of Mission 21 - S.A. Brusic, D.D. Dunlap, dr. W.E. Dugger, Jr.	410
Technological literacy in the curriculum of Polish elementary school and technology teacher training - A. Grodzka- Borowska, prof.dr.hab. H. Szydowski	416
Technology at the teacher training institutions in Kenya: is it there? - dr. R.J.A. Kapiyo	433
The pedagogical interest of youth and technics - drs. J. van der Laan, drs. F. Cornelissen	449
Promoting literacy with the use of computers at the primary level - dr. M.A. Moore	453
Training for Technology Education at primary schools and gymnasias - ing. H. Novakova, Csc.	470
Primary school technology in the Netherlands: the project BASTEC - prof.dr. J.H. Raat, drs. K. Kuipers, drs. H. Siegers	475
Summary of theme 4 - drs. J. Apperloo, prof.dr. J.H. Raat	477

FINAL SESSION

Conclusion and closing of PATT-4 conference and the opening of the Dutch Mini-conference - dr. R.J.A. Kapiyo	479
---	-----

LIST OF PARTICIPANTS	485
-----------------------------	-----

REGISTER OF AUTHORS	492
----------------------------	-----