

# Effective Policies for Supporting Education and Employment of Women in Science and Technology : Case of Korea

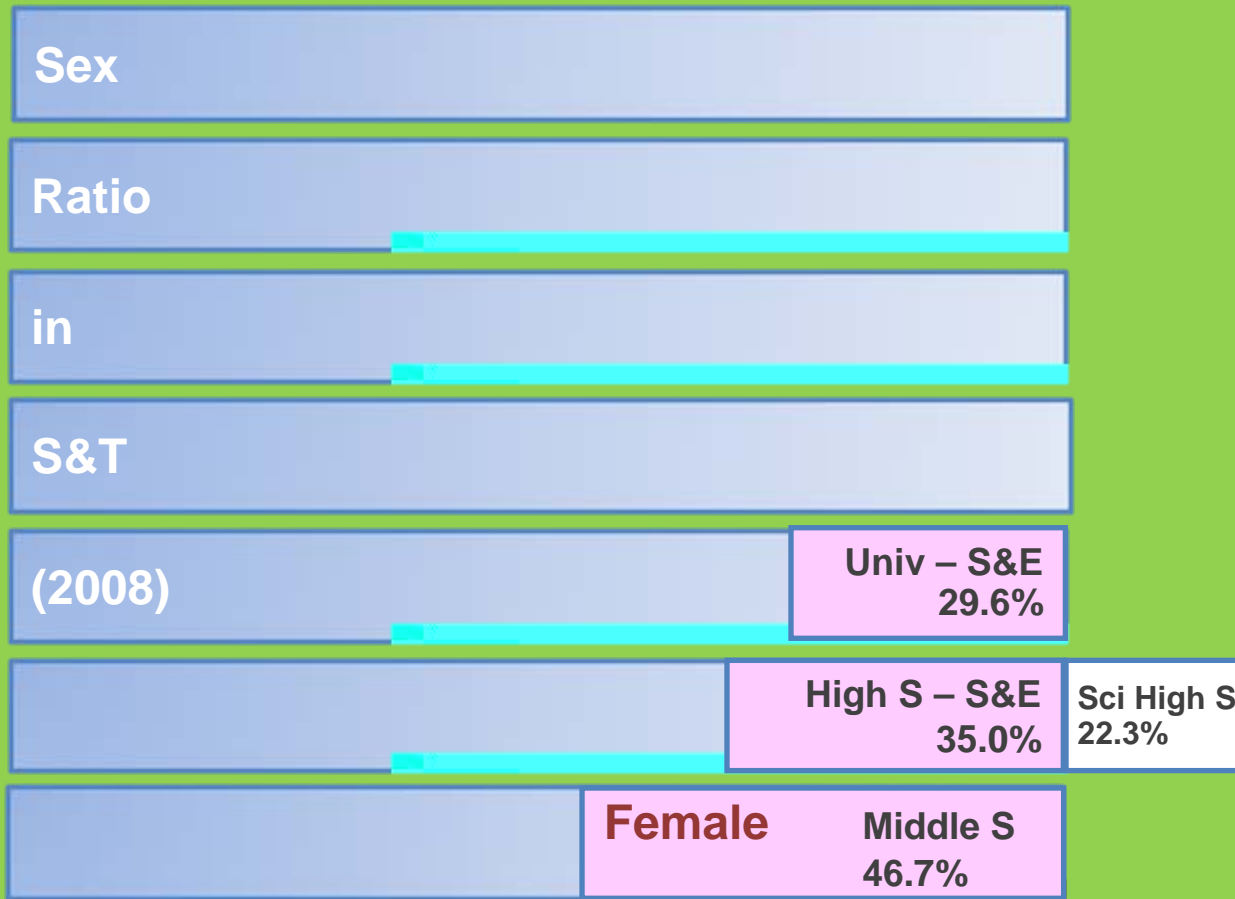
*Kong-Ju-Bock Lee*

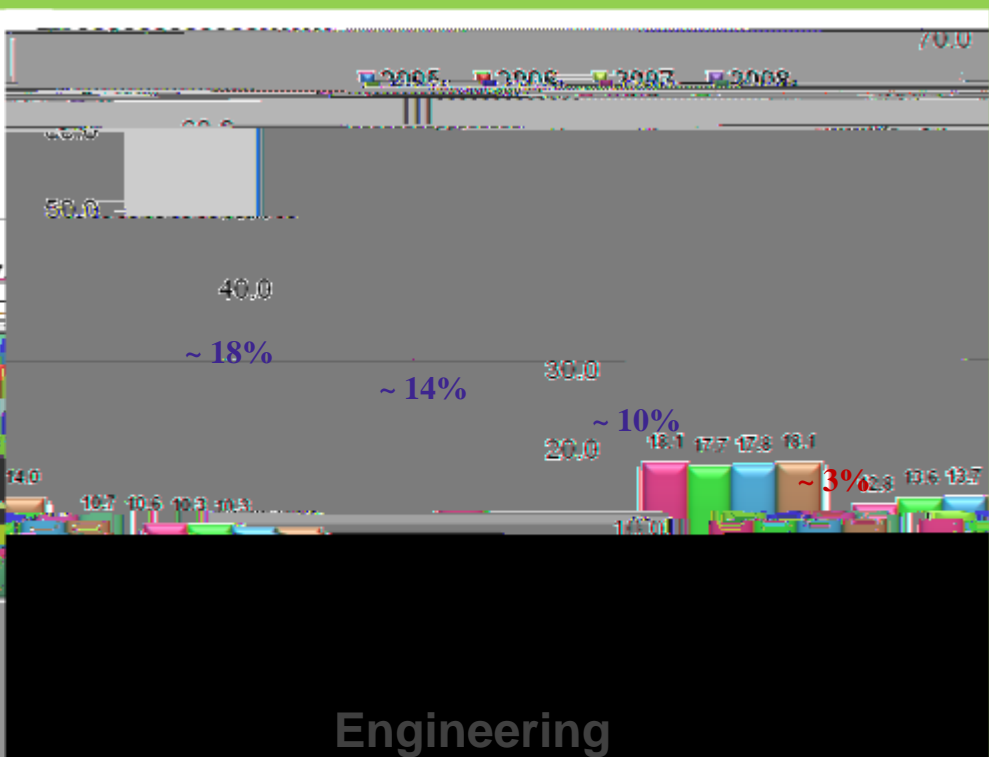
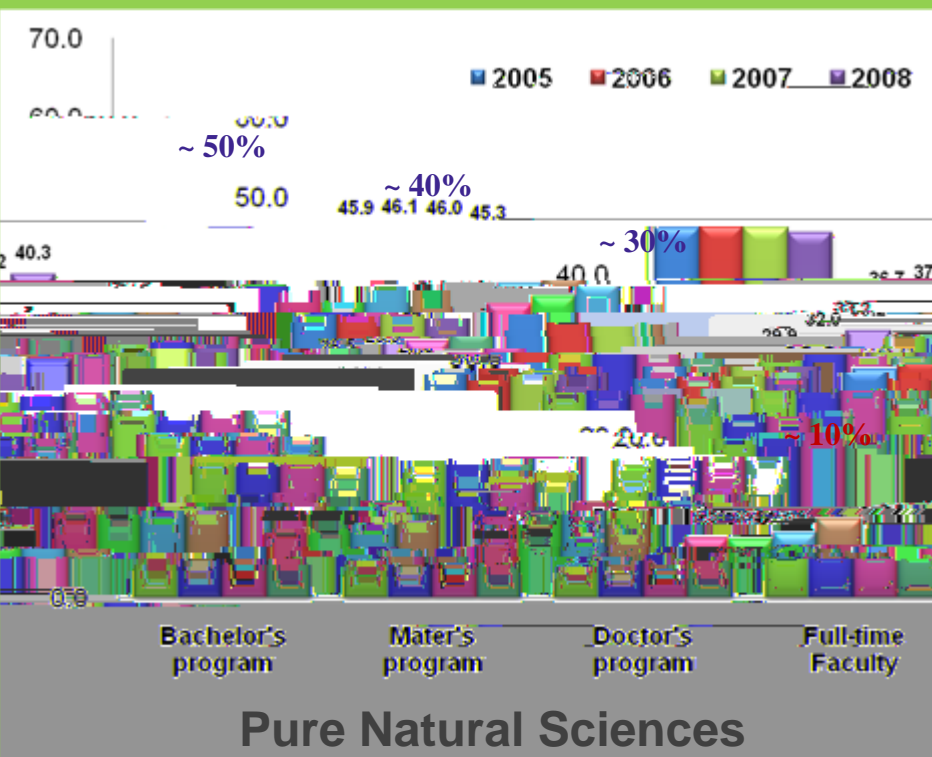
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 **Introduction : Women Resources in S&T, KOREA**

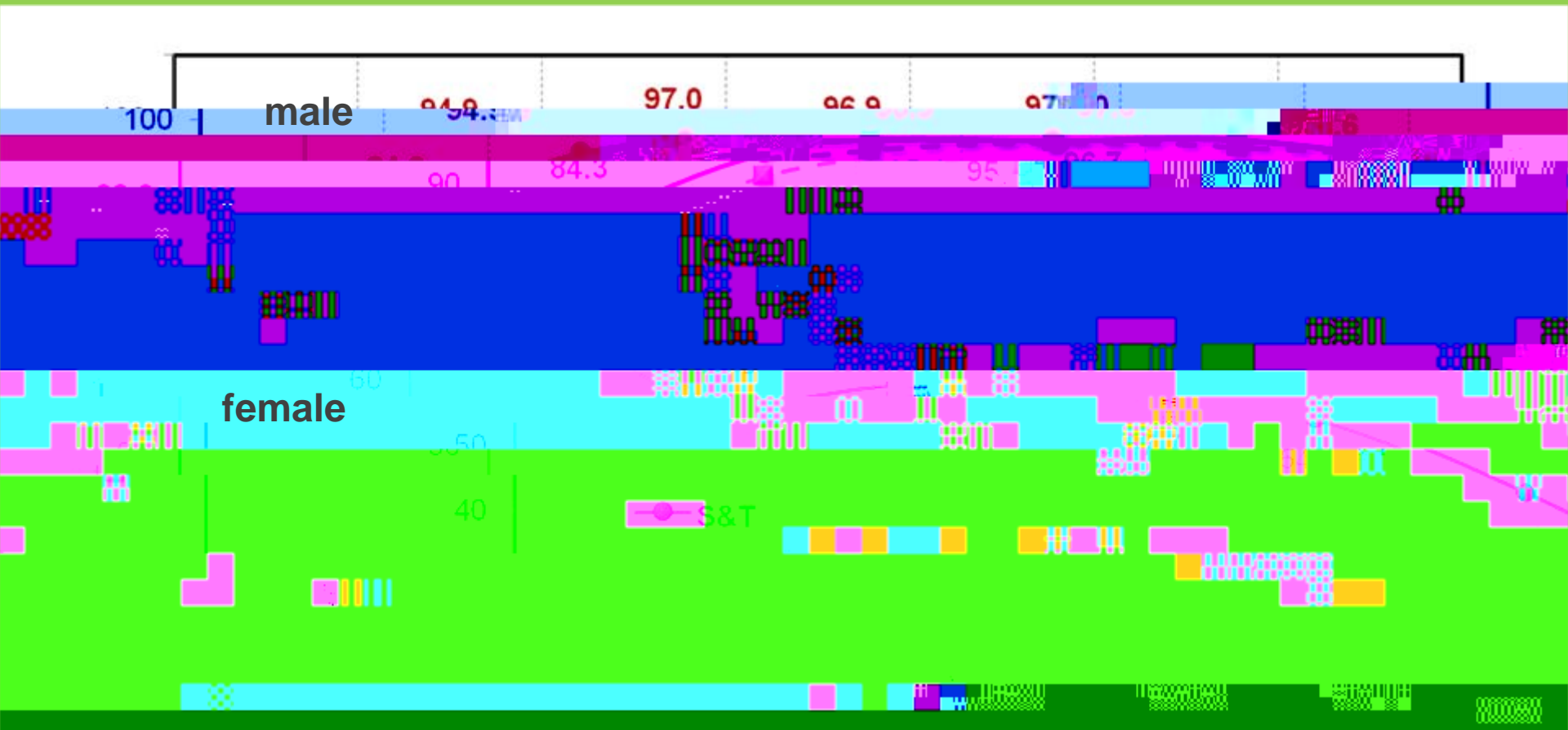
 **Key Policies and Outcome**

 **Proposals for Effective Policies and Programs**





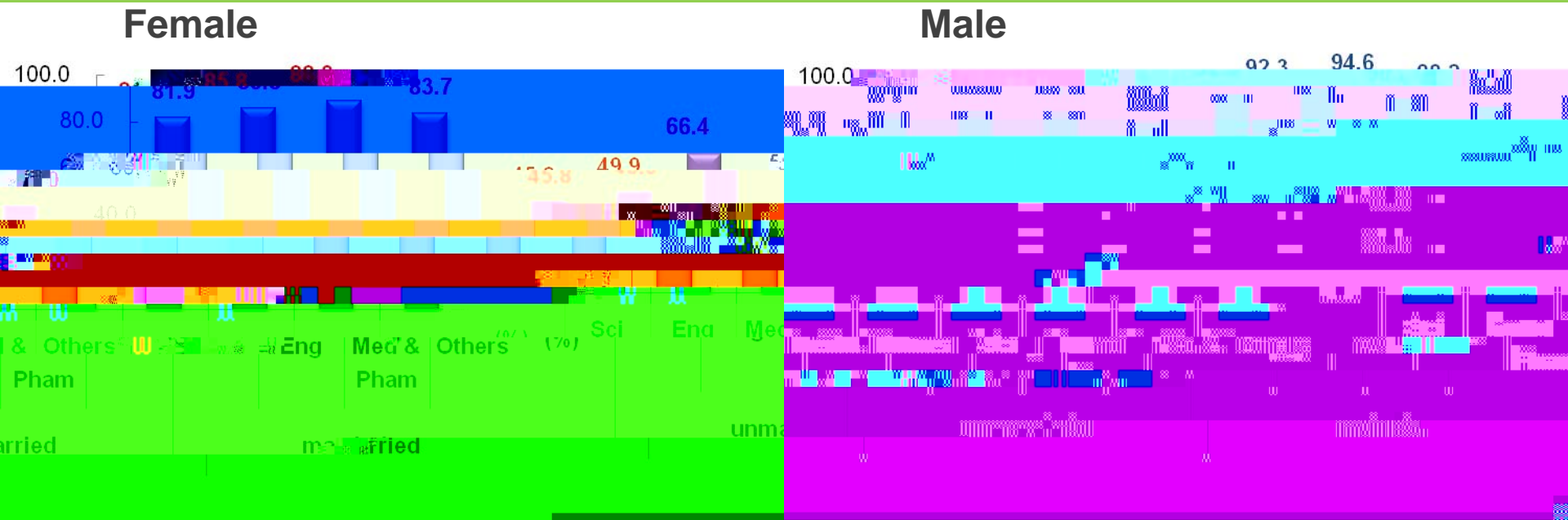
[ Ratio changes of women in S&T at academia ]



Source : STATISTICS KOREA, Report on Economic Activity Status and Participation Rate (2008)

## [ Economic Activity Participation Rate ]





Source : STATISTICS KOREA, Report on Economic Activity Status and Participation Rate (2008)

[ Economic Activity Participation Rates of (un)married by major ]



## Introduction : Women Resources in S&T, KOREA







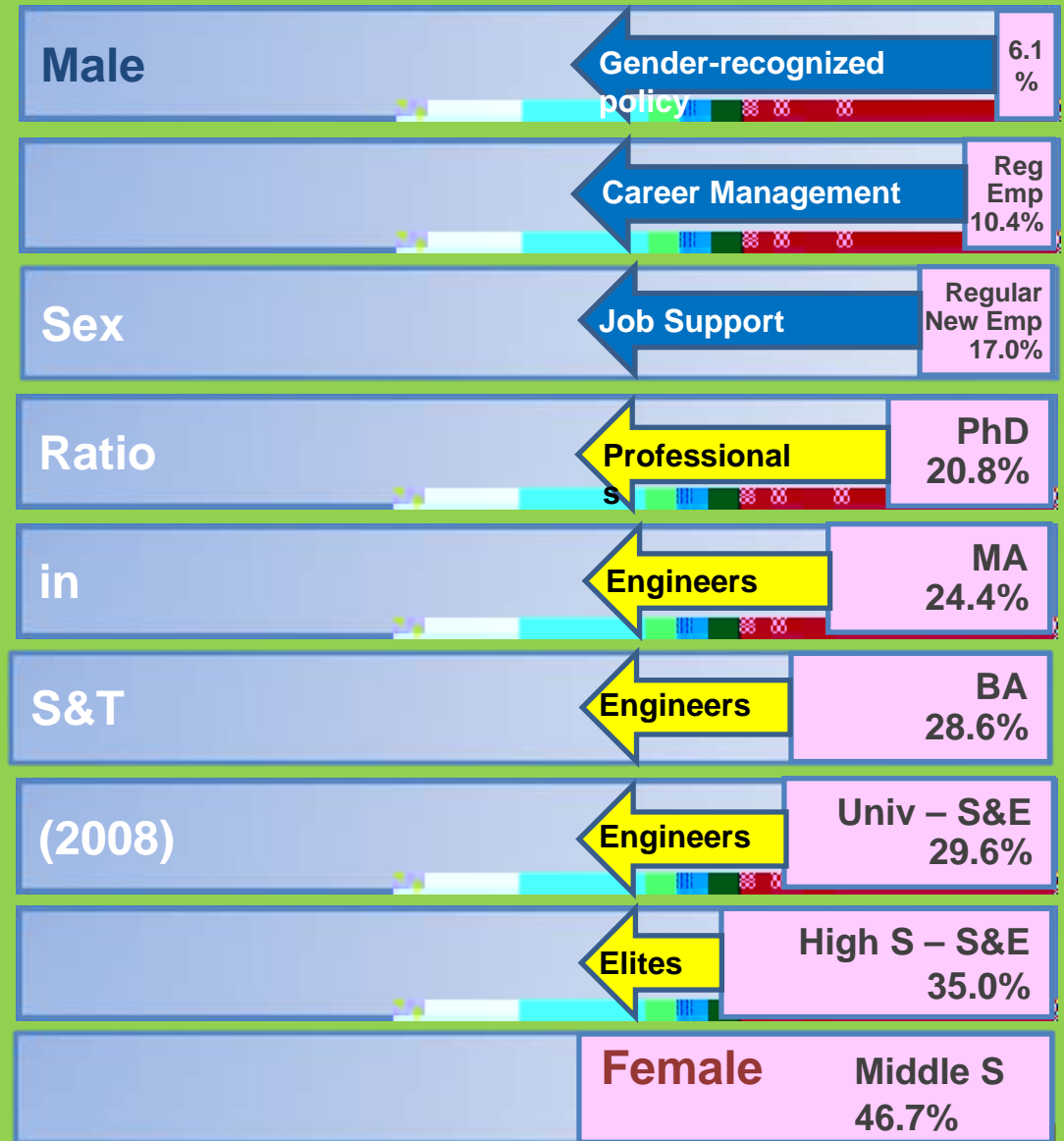
- Recruitment Target System (RTS)
- Promotion Target System (PTS)
- Officer in Charge of WSE
- Childcare Center
- Research Funds Exclusively for Women Scientists and Engineers
- ISWIST (2004 ~ )

Legal action center : Policy research, Training, Information Hub, Supporting NGO's activity, WISTFIT project...

- WISE Program (2001 ~ )  
On/Off Line Mentoring

- WIE Project (2006 ~ )  
Leading University of engineering education for women

- WATCH21 program (2004 ~ )  
R&E program at engineering research lab



Program	Stage	Elementary School	Middle School	High School	College	Graduate School	Unemployed	Employed	Retired
Education/ Training/ Mentoring			<ul style="list-style-type: none"> <li>• Mentoring</li> <li>• Visiting Lab</li> <li>• Sci Camp</li> <li>• Mathematics-Research Conference</li> </ul>	<ul style="list-style-type: none"> <li>• Mentoring</li> <li>• S&amp;E Research Camp</li> <li>• S&amp;E Research Conference</li> <li>• R&amp;E Program</li> </ul>	<ul style="list-style-type: none"> <li>• Mentoring</li> <li>• International S&amp;E Camp</li> <li>• R&amp;E Program</li> <li>• Gender Recognized Edu.</li> </ul>	<ul style="list-style-type: none"> <li>• R&amp;E Program</li> <li>• Leadership T.</li> <li>• Communication Training</li> <li>• New Research Technique T.</li> </ul>	<ul style="list-style-type: none"> <li>• Job Training (SC, LM, PS)</li> <li>• Leadership T.</li> <li>• Communication Training</li> <li>• New Research Technique T.</li> </ul>	<ul style="list-style-type: none"> <li>• Mentoring</li> <li>• Leadership T.</li> <li>• Communication Training</li> <li>• New Research Technique T.</li> </ul>	
Career Development /Retention									

Objective	Key Policy	Outcome
<b>Education</b>	<b>WISE</b> Women Into Science and Engineering	<ul style="list-style-type: none"> <li>• 1,300 mentor-mentee pairs ('07)</li> <li>• 35,000 girls participated in WISE programs ('07)</li> </ul>
	<b>WIE</b> Women In Engineering	<ul style="list-style-type: none"> <li>• 52 new courses developed and 53 improved ('06-'08)</li> <li>• Employment rate of women: 66.1%('06)à 76.8%('08)</li> <li>• Satisfaction : more than 80% of participants</li> </ul>
	<b>WATCH21</b> Women's Academy for Technology Changer in the 21 Century	<ul style="list-style-type: none"> <li>• 315 teams and 2,238 female students participated ('04-'09)</li> <li>• Satisfaction: more than 90%of participants</li> </ul>
<b>Employment, Retention</b>	<b>Recruitment Target S.</b>	<ul style="list-style-type: none"> <li>• Rate of women recruits in institutes: 18.2%('03)à 26.6%('09)</li> <li>• Rate of women faculty recruits: 5.2%('03)à 6.5%('05)</li> </ul>
	<b>Promotion Target S. (recommended)</b>	<p style="text-align: center;">Not measuable</p>
	<b>Designation of Officer in charge of WSE</b>	<ul style="list-style-type: none"> <li>• High synergy with WIST-FIT project of ISWIST</li> <li>• Best practice of WIST-FIT is from the organization with active Officer in charge of WSE</li> </ul>
	<b>Research Funds exclusively for WSE</b>	<ul style="list-style-type: none"> <li>• Budget: US\$2.5('00)à US\$15.7('10)</li> <li>• Ratio of women project-managers: 6%('03)à 14%('09)</li> </ul>
	<b>Childcare Center at S&amp;T Research Complex</b>	<ul style="list-style-type: none"> <li>• 300 babies and toddlers, open 7:30~22:30</li> <li>• WSE from 37 institutes are using.</li> </ul>
	<b>ISWIST</b> Institute for Supporting Women in Science and Technology	<ul style="list-style-type: none"> <li>• 40 policy-related research reports and proposals</li> <li>• 10,000 WSE trained/70% of job trainees are working</li> <li>• 25,000 WSE DB</li> <li>• Tens of programs developed</li> </ul>

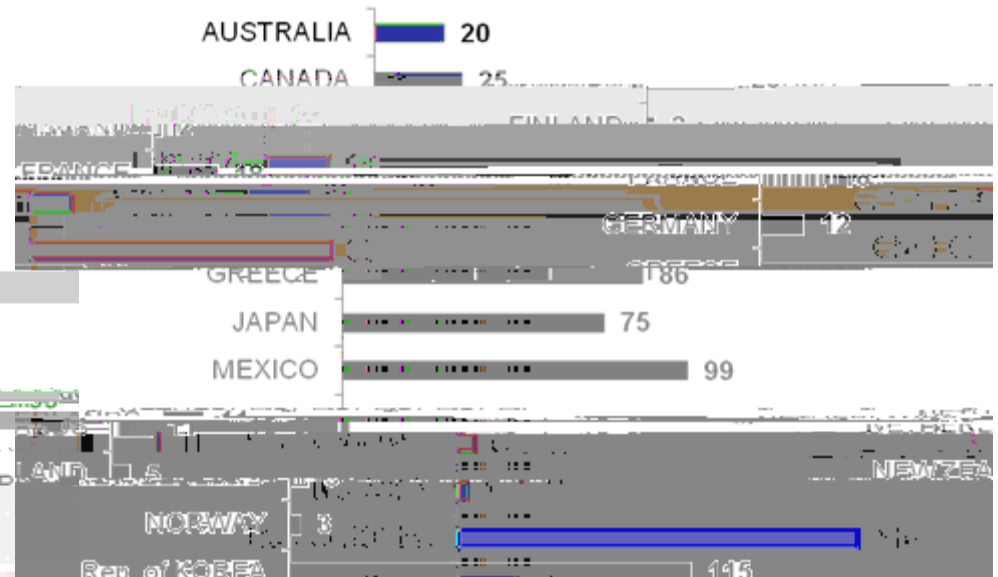
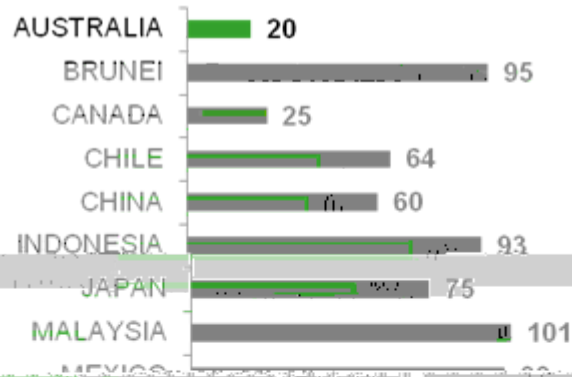
- **Introduction : Women Resources in S&T, KOREA**
- **Key Policies and Outcome**
- **Proposals for Effective Policies and Programs**

Effective Policies/Projects/Programs	Comment
<b>On/Off-line Mentoring Program</b>	<ul style="list-style-type: none"> <li>• Highly recommended in all stages of a woman' s life in S&amp;T</li> </ul>
<b>WIE Project</b> : Leading university of engineering-education for women students	<ul style="list-style-type: none"> <li>• Need to disseminate the developed programs to other college of engineering</li> </ul>
<b>Recruitment Target System</b>	<ul style="list-style-type: none"> <li>• Necessary for a time</li> <li>• Should be run concurrently with Employment Target System and Promotion Target System</li> </ul>
<b>Research Funds exclusively for Women Scientists and Engineers</b>	<ul style="list-style-type: none"> <li>• Encouraging for young scientists and engineers with experience in maternity leave or childrearing</li> </ul>
<b>Childcare Center at S&amp;T Research Complex</b>	<ul style="list-style-type: none"> <li>• A strong needs exists to build new nursery schools at other S&amp;T Research Complex.</li> </ul>
<b>ISWIST</b>	<ul style="list-style-type: none"> <li>• Action center for monitoring, steering, planning and implementing policies and programs for women scientists and engineers</li> <li>• A consolidated ISWIST will be launched in Jan, 2011 merging 3W projects.</li> </ul>

## Gender Gap Index (2009)

APEC

OECD



W/M = 0.71 in labor force participation  
 0.67 in enrolment in tertiary education  
 0.66 in professional and technical workers  
 0.52 in estimated earned income  
 0.16 in parliament  
 0.10 in legislators, senior officials and managers  
 0.05 in ministerial positions

