

Questionnaire on STEM-Related Courses Learning Experience

Your Gender: [Single Choice] *

Option	Subtotal	Percentage
Male	32	32.99%
Female	65	67.01%
Valid Responses for This Question	97	

Have you ever studied STEM-related courses (including Mathematics, Physics, Chemistry, Biology, Information Technology, Science, etc.)? [Single Choice] *

Option	Subtotal	Percentage
Yes	59	60.82%
No	38	39.18%
Valid Responses for This Question	97	

Your current educational stage (or the educational stage when you most recently studied STEM courses)? [Single Choice] *

Option	Subtotal	Percentage
Primary School	1	1.69%
Junior High School	1	1.69%
Senior High School	9	15.25%
University (Undergraduate or Junior College)	46	77.97%
Postgraduate (Master's or Doctoral)	2	3.39%
Others (Please specify):	0	0%
Valid Responses for This Question	59	

Which STEM-related courses have you been exposed to? [Multiple Choices] *

Option	Subtotal	Percentage
Mathematics (e.g., Algebra, Geometry, Calculus, etc.)	49	83.05%
Physics (e.g., Mechanics, Electricity, Optics, etc.)	40	67.8%
Chemistry (e.g., Inorganic Chemistry, Organic Chemistry, etc.)	40	67.8%
Biology (e.g., Biology, Ecology, etc.)	40	67.8%
Information Technology/Computer Science (e.g., Programming, Software Operation, etc.)	47	79.66%
Engineering Courses (e.g., Handicraft Production, Mechanical Principles, etc.)	17	28.81%
Integrated Science Courses	9	15.25%
Others (Please specify):	1	1.69%
Valid Responses for This Question	59	

During your childhood, did you frequently come into contact with such items? [Multiple Choices] *

Option	Subtotal	Percentage
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Option	Subtotal	Percentage
Building Blocks/Mechanical Toys (e.g., Lego, Detachable Mechanical Models, etc.)	31	52.54%
Science Experiment - Related Tools (e.g., Magnifying Glass, Microscope, Simple Experiment Kits, Plant Observation Boxes, etc.)	26	44.07%
Logical Toys (e.g., Programming Enlightenment Robots, Mathematical Puzzles, Circuit Building Blocks, etc.)	19	32.2%
Astronomy/Geography - Related Items (e.g., Globe, Telescope, Mineral Specimens, etc.)	20	33.9%
Hardly had any contact with the above items; childhood toys were mainly dolls, cards, and electric toys.	18	30.51%
Valid Responses for This Question	59	

Have your parents ever proactively purchased books, tools, or toys related to scientific phenomena (such as natural phenomena, mechanical principles)? [Single Choice] *

Option	Subtotal	Percentage
Often; they would provide targeted resources.	7	11.86%
Occasionally, but not frequently.	41	69.49%
Never; they usually gave simple answers or ignored the need.	11	18.64%
Valid Responses for This Question	59	

During your primary and secondary school years, have you participated in STEM-related extracurricular training or activities? [Multiple Choices] *

Option	Subtotal	Percentage
Programming and Robot Courses	12	20.34%
Science Experimental Classes (e.g., Chemistry Small Experiments, Interesting Physics Classes, etc.)	11	18.64%
Mathematical Thinking Training and Olympiad Math Classes	26	44.07%
Science and Technology Summer/Winter Camps (e.g., Model Aircraft, Astronomical Observation, etc.)	8	13.56%
Engineering Production Courses (e.g., Handmade Machinery, Introduction to 3D Printing, etc.)	7	11.86%
Have not participated in any STEM-related extracurricular classes.	24	40.68%
Valid Responses for This Question	59	

What is your level of interest in STEM-related courses? [Single Choice] *

Option	Subtotal	Percentage
Very Interested	11	18.64%
Relatively Interested	36	61.02%
Neutral	10	16.95%
Not Very Interested	2	3.39%
Not Interested at All	0	0%

Option	Subtotal	Percentage
Valid Responses for This Question	59	

When learning STEM-related courses, have you encountered gender - related stereotypes or prejudices (such as being told "Girls are not good at science and mathematics" or "Boys are smart and can learn it later")? [Single Choice] *

Option	Subtotal	Percentage
Yes	46	77.97%
No	13	22.03%
Valid Responses for This Question	59	

During the learning process, have you encountered the following situations due to your "own gender"? [Multiple Choices] *

Option	Subtotal	Percentage
Being ignored or having your ability questioned when asking questions or speaking in class.	9	19.57%
Being assigned tasks unrelated to the core content in group activities.	6	13.04%
Teachers/parents having a low evaluation of your STEM learning ability.	17	36.96%
Being advised that "there is no need to spend too much energy on such courses".	12	26.09%
Others (Please specify):	0	0%
Have not encountered such situations.	21	45.65%
Valid Responses for This Question	46	

After encountering discrimination due to "your own gender" during the learning process, has your mentality undergone the following changes? [Multiple Choices] *

Option	Subtotal	Percentage
Doubting that you are not suitable for learning STEM courses.	17	36.96%
Questioning whether you can achieve excellent results in STEM courses.	19	41.3%
Having a reduced interest in STEM-related courses.	19	41.3%
Thinking that you will encounter great difficulties in learning STEM courses in the future.	16	34.78%
Others	1	2.17%
No changes.	13	28.26%
Valid Responses for This Question	46	

Have you overcome or tried to overcome the above mentality? [Single Choice] *

Option	Subtotal	Percentage
Yes	34	73.91%
No	12	26.09%
Valid Responses for This Question	46	

What methods have you tried to cope with learning difficulties? [Multiple Choices] *

Option	Subtotal	Percentage
Organizing notes/drawing mind maps to sort out knowledge points.	37	62.71%
Doing more exercises/repeating experiments to strengthen practice.	41	69.49%
Repeating experiments to strengthen practice.	24	40.68%
Consulting others to clarify the problems.	45	76.27%
Learning in an interesting way (e.g., watching popular science videos, doing small science experiments, etc.).	18	30.51%
Making a study plan and completing tasks step by step.	24	40.68%
Adjusting your mentality and telling yourself "You can learn it by practicing more".	32	54.24%
Others (Please specify):	0	0%
Valid Responses for This Question	59	

What kind of support do you most want to obtain in the learning of STEM courses? [Multiple Choices] *

Option	Subtotal	Percentage
Support is not important.	3	5.08%
More understandable explanation methods (e.g., combining real - life cases, animation demonstrations, etc.).	48	81.36%
Experience sharing from seniors/excellent classmates.	35	59.32%
An equal and inclusive learning atmosphere (not being treated differently due to gender differences).	34	57.63%
More practical opportunities (e.g., experiments, project production, etc.).	41	69.49%
Targeted Q&A and tutoring.	33	55.93%
Others (Please specify):	2	3.39%
Valid Responses for This Question	59	

Are you willing to share your experiences of encountering "gender discrimination" in the learning of STEM-related courses and your coping experiences to help other students? [Single Choice] *

Option	Subtotal	Percentage
Yes	8	23.53%
No	26	76.47%
Valid Responses for This Question	34	

What form do you prefer to use for sharing? [Multiple Choices] *

Option	Subtotal	Percentage
One - on - one online interview (about 20 - 30 minutes, the duration will be adjusted according to the educational stage).	6	75%
Written experience contribution (e.g., short articles, descriptions of learning tips, etc.).	7	87.5%
Online sharing session (speaking briefly as a guest).	4	50%
Others (Please specify):	0	0%

Option	Subtotal	Percentage
Valid Responses for This Question	8	

Please leave your contact information (only used for subsequent communication about experience sharing, strictly confidential): [Single Choice] *

Option	Subtotal	Percentage
WeChat/QQ:	5	62.5%
Email:	3	37.5%
Valid Responses for This Question	8	