

Table 6. t-test summary of male and female respondents' perceptions of technology integrations in terms of obstacles to their effective use of technology in teaching mathematics

Variables	Gender	N	\bar{X}	SD	t	sig
1.Lack of personal preparation time	Male	21	3.24	.625	-0.946	.849
	Female	14	3.43	.514		
2.Inexperience with the technology	Male	21	3.48	.680	1.581	.665
	Female	14	3.07	.829		
3.Insufficient help	Male	21	3.00	.837	0.00	1.00
	Female	14	3.00	.877		
	Male	21	2.29	1.007		
4.Limited school resources	Female	14	2.43	.852	-0.436	.504
5.Using technology means I need to teach many things twice, with and without the technology	Male	21	3.52	.512	0.954	.216
	Female	14	3.36	.497		
6.Lack of course alignment with technology	Male	21	3.29	.644	1.357	.061
	Female	14	3.00	.555		
7.Lack of classroom time	Male	21	3.05	.865	0.834	.624
	Female	14	2.79	.975		
8.The technology is too expensive for my students to afford	Male	21	2.19	.981	-0.961	.858
	Female	14	2.50	.855		
9.Lack of pedagogical support	Male	21	2.76	.889	0.167	.397
	Female	14	2.71	.726		
10.Lacking of teacher competence	Male	21	3.24	.944	0.780	.166
	Female	14	3.00	.784		
11.Lack of professional development training in technology integration in teaching mathematics	Male	21	2.95	.805	1.753	.653
	Female	14	2.50	.650		
12.No explicit time spent on planning how to integrate the technology in teaching mathematics	Male	21	2.86	.854	0.514	.497
	Female	14	2.71	.726		
13.Curricula are not ready to use new technologies	Male	21	2.76	.995	1.063	.415
	Female	14	2.43	.756		
14.Using technology is too fraught with technical difficulties	Male	21	3.00	.837	1.357	.732
	Female	14	2.64	.633		
15.Not enough encouragement to use them	Male	21	2.86	.793	-0.808	.756
	Female	14	3.07	.730		

The mean of the assessment ratings elicited from the male respondents as well as from female respondents were used. Table 7 shows the difference between the male self-assessment and female self-assessment of technology integration in terms of students' classroom usage of technology in teaching mathematics. According to t-test results, it can be concluded that female teacher respondents ($x = 3.96$) technology in teaching mathematics were more likely to assess that

students are interacting and communicating differently with the help of technology in teaching mathematics [$t(4.36) = -.68$ $p < .05$] and students become more independent learners as a result of technology [$t(4.6) = -1.8$ $p < .05$ than male teacher respondents ($x = 3.86$). Specific results regarding the competency level of male and female teacher respondents are presented in the said table.

Table 7. t-test summary of male and female respondents' perceptions of technology integrations in terms of their classroom usage of technologies in teaching mathematics

Variables	Gender	N	\bar{X}	SD	t	sig
1.Students are interacting and communicating differently with the help of technology	Male	21	4.19	.814	-.684	.041*
	Female	14	4.36	.497		
2.Students become more independent learners as a result of technology.	Male	21	4.00	1.095	-1.817	.045*
	Female	14	4.57	.514		
3.Students use computers only is lab.	Male	21	2.52	1.209	-.320	.123
	Female	14	2.64	.842		
4.Students are more engaged in learning mathematics due to technology.	Male	21	3.81	.602	1.035	.194
	Female	14	3.57	.756		
5.Students' understanding of mathematics subjects has deepened due to technology use.	Male	21	3.81	.928	-.373	.730
	Female	14	3.93	.917		
6.Students use technology in other subjects aside from mathematics.	Male	21	4.14	.910	-1.327	.097
	Female	14	4.50	.519		
7.Students get good grades in mathematics due to technology integration.	Male	21	3.62	.973	-.077	.396
	Female	14	3.64	.745		
8.Mathematics is more interesting and meaningful to students when using graphics calculators and other technologies.	Male	21	4.29	.644	-.600	.341
	Female	14	4.43	.756		
9.Students become more confident in mathematics due to technology integration.	Male	21	4.19	.873	.688	.605
	Female	14	4.00	.679		
10.Improve students' behavioral engagement during lessons and learn mathematics better	Male	21	4.05	.669	.702	.205
	Female	14	4.00	.679		

Significant: *p < 0.05

3.1. Group interviews

The following can be concluded for the conducted group interviews: (1) All teachers agreed no strong support from the university like sending teachers to trainings for professional development with regards to technology in teaching-learning process and lack of equipment and facilities in technologies including rooms for instruction and for laboratory use; (2) Both male and female teachers complained about poor internet connection or wifi is not readily accessible; (3) Both male and female teachers said that there is lack of consultation regarding their specific needs in their subject area like what software is needed in teaching specific mathematics subject; (4) Some male and female teacher respondents claimed that teachers should use a variety of teaching methods in teaching mathematics; and (5) Some male and female teacher respondents admitted that they want to have their own different electronic gadgets or technology tools however, they could not afford to buy them due to financial constraints.

Furthermore, the respondents pointed out that their efforts in teaching mathematics with technology, though infrequently were motivated by their assess-

mentics. As one of the male teacher participants stated, "we use technology because it allows our students to be active learners and both teachers and learners benefited. "The participants also mentioned and claimed that the following are considered as incentives and rewards that the university should provide them: (1) digital support for media and e-books; (2) extra resources such as devices or access portal for operation of technology; (3) provide monthly training to all mathematics teachers regarding technology use and integration to teaching-learning process; (4) mathematics rooms with complete equipment like Television or projectors with internet access; (5) financial support for teachers to motivate them to integrate technology in teaching. Piotrowski and Vodanovich [22] believed that the availability of adequate rewards or compensation is also important and may influence teachers' use of technology. Incentives or rewards, according to them, can stimulate teachers to be more innovative within their teaching. If teachers are not provided with adequate rewards or incentives, or if the compensation they receive is no difference from their conventional teaching, teachers may not be motivated to upgrade their skills in using technology for teaching [23].

4. Conclusion

To shape plans and directions for future faculty development program involving technology integration not only in mathematics but also in other fields of the curricular programs of the university is indeed very crucial. The academic leaders such as Deans are also critical in creating an environment which should encourage and support effective teaching by setting priorities for the academic unit they supervise. They should focus on the curriculum design and once the integration has started and the teachers are already modeling the integration into coursework, including the trainings and expectations for all faculty is appropriate. This will take planning and allowing time for change and adoptions which may be considered a big challenge not only for teachers but also for the entire academic community.

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