Study on Applied Learning (2010-12 cohort) Progress Report

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FOREWORD

The Study on Applied Learning aims to collect stakeholders' views on the preparation for, and the implementation and impact of the Applied Learning curriculum in senior secondary education. Respondents consisted of four stakeholder groups, i.e. students, parents, schools (which included school heads and school coordinators for Applied Learning) and course providers (which included course provider coordinators and course tutors) that had participated in Applied Learning in the 2010-12 cohort. A combination of quantitative and qualitative survey methods was employed. In the quantitative phase, a total of 1 758 student questionnaires, 1 076 parent questionnaires, 353 school questionnaires and 146 course provider questionnaires were received. A total of 150 students, 15 parents, 10 school heads, 10 school coordinators for Applied Learning, 44 course provider coordinators and 33 course tutors participated in the qualitative phase. The progress report focuses on findings under four themes, namely, curriculum aims and overall satisfaction; impact on students; professional development of teachers and support; and future development of Applied Learning.

Feedback collected from the Study indicated that the concept of Applied Learning received high acceptance. Large proportions of stakeholders agreed that objectives of Applied Learning were fulfilled. Overall, Applied Learning received great satisfaction from all stakeholders groups. Stakeholders further agreed that Applied Learning had positive impact on students in various aspects, including students' personal growth, learning, and values and future orientation. More than half of relevant stakeholders expressed need for various professional development and support activities.

For future development of Applied Learning, relevant stakeholders requested improvement on recognition and articulation pathways and made suggestions on a range of new Applied Learning courses, indicating room for further development and/or addition of courses.

Similar to other studies, key findings of the Study on Applied Learning had informed the overall New Academic Structure Review, of which its first progress report, "Progress Report on the New Academic Structure Review: The New Senior Secondary Learning Journey – Moving Forward to Excel" was uploaded (http://334.edb.hkedcity.net/EN/334_review.php) in April 2013. Cross-referencing among studies and the review report is encouraged.

BACKGROUND OF THE STUDY

A. INTRODUCTION

1. The Study on Applied Learning (the "Study") aims to collect stakeholders' views on the preparation for, and the implementation and impact of the Applied Learning curriculum in senior secondary education.

2. The Study was conducted among four stakeholder groups that had participated in Applied Learning in the 2010-12 cohort. These included students, parents, schools (which included school heads and school coordinators for Applied Learning[1]) and course providers (which included course provider coordinators and course tutors).

3. To achieve the Study objectives, a combination of quantitative and qualitative survey methods was employed. In the quantitative phase of the survey, self-administered questionnaire complemented with telephone follow-up was adopted to collect views from respondents.   In the qualitative phase of the Study, group and in-depth interviews were adopted to explore respondents' opinion in depth.

4. The quantitative phase of the Study was conducted from May to July 2011.   A total of 1 758 student questionnaires, 1 076 parent questionnaires, 353 school questionnaires and 146 course provider questionnaires were received.

5. The qualitative phase of the Study was conducted from October 2011 to January 2012.   A total of 150 students and 15 parents were interviewed via telephone, while 10 school heads, 10 school coordinators for Applied Learning, 44 course provider coordinators and 33 course tutors were enumerated.

B. INTERPRETATION OF SATISFACTION RATINGS

6. The following guideline is employed to ensure consistent interpretation of satisfaction ratings as reported throughout the survey.

    (a)   The result of satisfaction rating of attribute is commented as "extremely satisfied" if that attribute achieved an over 90% to 100% level of positive mentions[2] from the respondents.

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[1]   School coordinators for Applied Learning are teachers designated by schools to be responsible for Applied Learning implementation and to work in collaboration with the EDB and course provider(s) in providing support and guidance for students in selecting and studying Applied Learning courses.

[2] "Positive Mentions" refers to the consolidated responses of "Very Satisfied" and "Satisfied", "Strongly Agree" and "Agree, or "Strong Positive" and "Weak Positive" in the corresponding questions.

(b)   The result of satisfaction rating of attribute is commented as "very satisfied" if that attribute achieved an over 75% to 90% level of positive mentions[2] from the respondents.

(c)   The result of satisfaction rating of attribute is commented as "satisfied" if that attribute achieved an over 60% to 75% level of positive mentions[2] from the respondents.

(d)   The result of satisfaction rating of attribute is commented as "fairly satisfied" if that attribute achieved an over 50% to 60% level of positive mentions[2] from the respondents.

KEY FINDINGS

7.   The findings of the Study are reported under the following themes: curriculum aims and overall satisfaction; impact on students; professional development of teachers and support; and future development of Applied Learning.

A.   CURRICULUM AIMS AND OVERALL SATISFACTION

Curriculum Aims

8.   The concept of Applied Learning received high acceptance from different stakeholder groups in the quantitative study, as reflected by the following key attributes:

(a)   Almost all school heads and school coordinators recognised that Applied Learning was able to facilitate diversity in the senior secondary curriculum (98.8% and 97.0% respectively);

(b)   There were extremely high levels of agreement among stakeholders on the aims of Applied Learning (95.7%, all stakeholder groups) (Table 1); and

(c)   The vast majority of stakeholders also observed the achievement of each of the Applied Learning objectives[3].

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[3]   The objectives of Applied Learning included:
- offer diverse learning programmes catering for students' interest and inclination;
- enable students to understand fundamental theories and concepts through application and practice;
- provide learning experience that promotes life-long learning for further studies and/ or work;
- provide students with opportunities to explore their career aspirations and orientation for life-long learning in specific areas; and
- enable students to develop their generic skills in authentic contexts.

Table 1   Agreement among Stakeholders on the Aims of Applied Learning

Aims of Applied Learning		Total %	Stakeholder Groups %			
			School Heads	School Coordin-ators	Course Provider Coordin-ators	Course Tutors
Agreement on the Aims of Applied Learning	Positive Mentions	95.7	96.7	96.0	95.7	93.9

9.   There were also large proportions of stakeholders who agreed that specific objectives were fulfilled:

(a)   Nearly all school heads and school coordinators considered that the aim of offering diverse learning programmes catering for students' interests and inclination (99.2% and 95.8% respectively) was attained (Table 2). For course provider coordinators and course tutors, extremely high proportions of them also agreed that students were provided with learning environment and experience that nurtured their interest in course-related domains (100.0% and 99.0% respectively). Around three-quarters of students considered Applied Learning as interesting and fun (76.7%).

(b)   For the objective of enabling students to understand the fundamental theories and concepts through application and practice, close to 95% school heads and school coordinators observed the achievement of this objective (96.1% and 93.4% respectively), while all course provider coordinators and course tutors observed achievement on this. For students, eight in ten (80.5%) of them also agreed that Applied Learning courses provided adequate opportunities for them to master the fundamental concepts and theories through application and practice (Table 2).

(c)   The level of achievement of the objective of providing learning experience that promoted life-long learning for further studies and/or work was also widely agreed by school and course provider respondents (93.5%, school heads; 90.7%, school coordinators; 100.0%, course provider coordinators; 98.0%, course tutors) (Table 2).

(d)   In terms of providing students with opportunities to explore their career aspirations and orientation for life-long learning in specific areas, nearly nine in ten school and course provider respondents observed achievement on this objective (91.6%, school heads; 92.3%, school coordinators; 100.0%, course provider coordinators; 97.0%, course tutors) (Table 2).

(e)   The level of achievement of the objective of enabling students to develop their generic skills in authentic contexts was at around 85% for school respondents (87.8%, school heads; 85.4%, school coordinators). For course providers, their opinion on this objective is extremely high

(100.0%, course provider coordinators; 97.0%, course tutors) (Table 2).

Table 2   Achievement of Objectives of Applied Learning

Objectives of Applied Learning		Total %	Stakeholder Groups %				
			Students	School Heads	School Coordin-ators	Course Provider Coordin-ators	Course Tutors
Offering Diverse Learning Programmes Catering for Students' Interests and Inclination	Positive Mentions	97.2	-	99.2	95.8	-	-
Providing Learning Experience that Promotes Life-long Learning for Further Studies and / or Work	Positive Mentions	93.8	-	93.5	90.7	100.0	98.0
Providing Students with Opportunities to Explore Their Career Aspirations and Orientation for Life-long Learning in Specific Areas	Positive Mentions	93.8	-	91.6	92.3	100.0	97.0
Enabling Students to Develop Their Generic Skills in Authentic Contexts	Positive Mentions	89.8	-	87.8	85.4	100.0	97.0
Enabling Students to Understand Fundamental Theories and Concepts Through Application and Practice	Positive Mentions	82.1	80.5	96.1	93.4	100.0	100.0

10. In the qualitative study, school heads mentioned fulfilment of the following aims of Applied Learning:

   (a) Facilitating diversity in student learning via the provision of courses with stronger elements of practical learning;

   (b) Relating learning with real life experience and also addressing the needs and learning interest of students;

   (c) Offering students the opportunities of practical learning; and

   (d) Enabling students to understand the fundamental theories and concepts of the course-related industries and facilitating their exploration of career orientation.

11. However, one school head felt that the aims of Applied Learning were too difficult to achieve and schools needed more time to evaluate if there were any concrete results of participating in Applied Learning.

Overall Satisfaction

12. Applied Learning received great satisfaction from relevant stakeholder groups (including students, parents, school heads and school coordinators) in various aspects:

    (a)   The overall satisfaction with the Applied Learning was very high (87.3%) (Table 3); and

    (b)   Around three-quarters of relevant stakeholder groups stated that they would recommend Applied Learning to other students/ schools (73.8%) (Table 3).

Table 3   Overall Satisfaction on Applied Learning

| Overall Satisfaction on Applied Learning		Total %	Stakeholder Groups %			
			Students	Parents	School Heads	School Coordinators
Overall Satisfaction on Applied Learning	Positive Mentions	87.3	87.3	86.9	92.8	86.1
Recommendation of Applied Learning to Others	Positive Mentions	73.8	73.5	71.1	87.9	80.9

B. IMPACT ON STUDENTS

Impact on Students' Personal Growth

13. Applied Learning was considered to impact positively on students in various aspects, including students' personal growth, their learning, and their values and future orientation.

14. All stakeholder groups held the view that students who took Applied Learning in the current school year performed well in areas concerning their personal growth. The good performance was mostly observed in the understanding of fundamental theories and concepts (92.5%), followed by foundation skills (87.8%), thinking skills (86.0%), people skills (85.7%), generic skills (83.6%), career-related competencies (83.1%), values and attitudes (83.0%), and exploration of career aspirations and orientation for life-long learning in specific areas (78.7%) (Figure 1).

Figure 1   Impact of Applied Learning on Students' Personal Growth

Category	Total agreement (%)
Understanding Fundamental Theories and Concepts	92.5
Foundation Skills	87.8
Thinking Skills	86
People Skills	85.7
Developing Generic Skills	83.6
Career-related Competencies	83.1
Values and Attitudes	83
Exploring Career Aspirations and Orientation for Life-long Learning in Specific Areas	78.7

■ Total agreement (%)
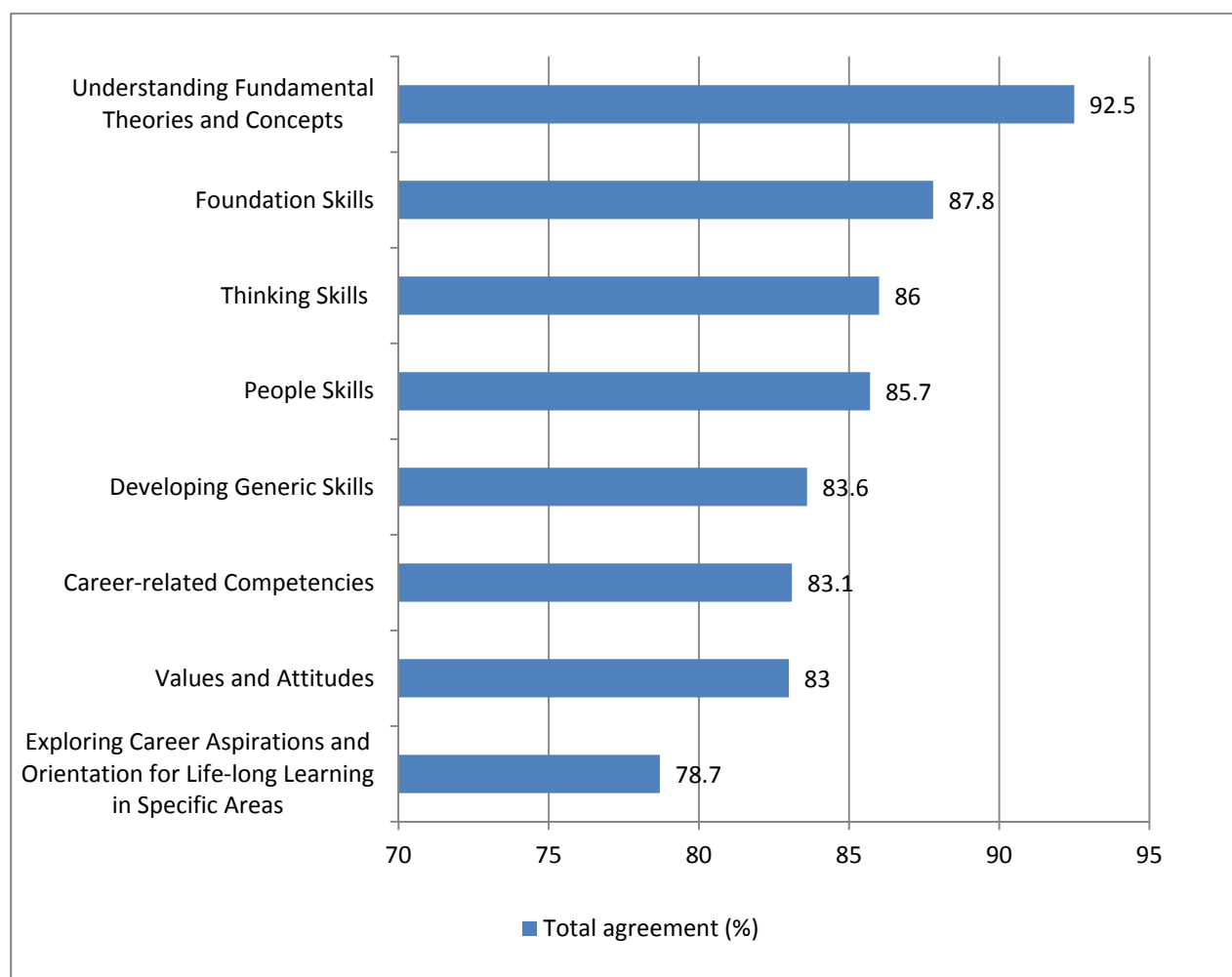
15. As reflected in the qualitative survey, Applied Learning benefited students' personal growth in the following ways:

(a) Foundation skills: The interactive learning and teaching activities (such as group discussion, project work, presentation) used in class had helped students communicate better with other people;

(b) Thinking skills: Students had more opportunities to practise their thinking skills as the courses often required them to analyse various information / cases, or to find solutions for different problems.   The courses had also broadened their scope of thinking; and

(c) People skills: After taking the courses, students had expanded their people network and met people from different walks of life which gave them more opportunities to polish their people skills.

Impact on Students' Learning

16. Most stakeholders also noted that Applied Learning had positive impact on students' learning, especially on widening of their horizons (92.8%). Other positive outcomes included arousing students' learning interest (81.7%), helping them learn how to learn independently (81.4%), and enhancing their self-confidence (81.1%) (Figure 2).

Figure 2   Impact of Applied Learning on Students' Learning
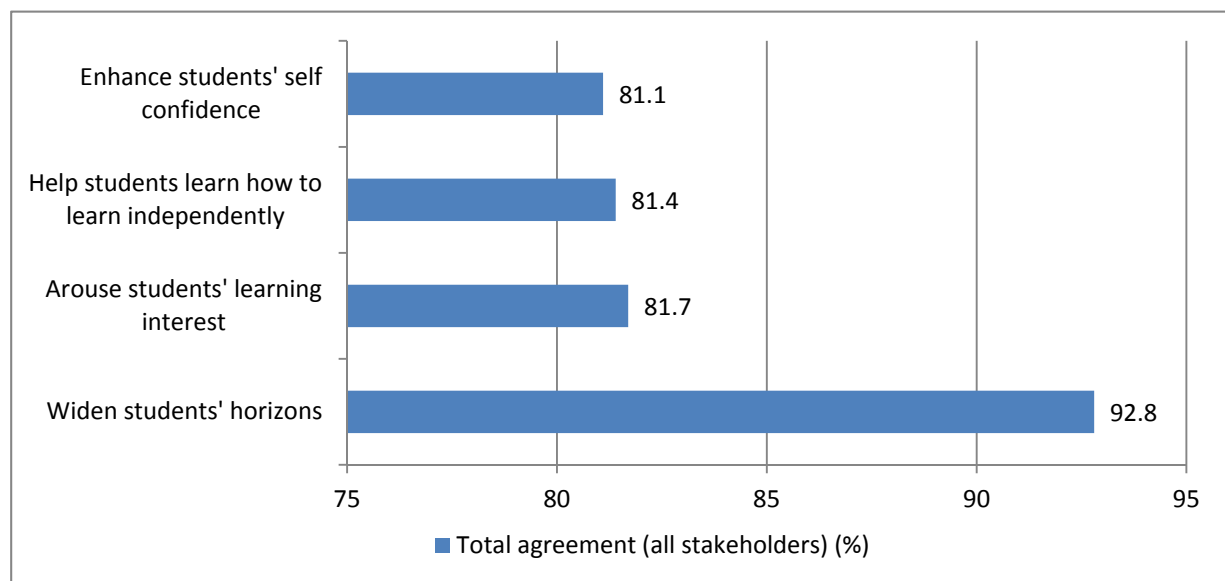
17. Respondents explained in the qualitative survey that Applied Learning impacted on students' learning interest as students understood their abilities better and obtained a sense of achievement from the courses, and therefore became more enthusiastic in learning.

Impact on Students' Values and Future Orientation

18. Positive effect of Applied Learning on students' values and future orientation was also observed by stakeholders. The aspects that benefited most were the acquisition of knowledge, skills and attitudes for employment in course-related industries (89.5%) and for further studies in course-related programmes (88.5%). There were also very high proportions of stakeholders who opined that students learnt to look at things from different perspectives (84.2%) and could apply the knowledge gained from Applied Learning to solve daily life problems (75.8%) (Table 4).

Table 4   Impact of Applied Learning on Students' Values and Future Orientation

| Impact on Students' Values and Future Orientation		Total %	Stakeholder Groups %					
			Students	Parents	School Heads	School Coordin-ators	Course Provider Coordin-ators	Course Tutors
Students Acquire Knowledge, Skills and Attitudes for Employment in Course-related Industries	Positive Mentions	89.5	89.2	87.1	97.2	92.7	100.0	99.0
Students Acquire Knowledge, Skills and Attitudes for Further Studies in Course-related Programmes	Positive Mentions	88.5	87.3	88.1	95.3	88.6	100.0	99.0
Students Learn to Look at Things from Different Perspectives	Positive Mentions	84.2	84.6	84.0	78.4	75.7	97.9	98.0
Students are Able to Apply What They Have Learnt from Applied Learning to Solve Daily Life Problems	Positive Mentions	75.8	75.7	75.4	76.3	64.7	100.0	92.9

19. As reflected in the qualitative survey, Applied Learning benefited students' values and future orientation in the following ways:

(a) Values and attitudes: Most of them had become more mature, independent, patient, conscientious and held a more positive outlook on both work and life.   They also had higher expectations on themselves; and

(b) Career-related competencies: Applied Learning provided them with the knowledge, skills, workplace requirements and operation flow of the related industries with hands-on experiences, all of which were needed for their future career.

Provision of Learning Environment and Experience to Students

20. Nearly all course provider coordinators and course tutors commented that Applied Learning provided learning environment and experience that reflected social, economic and technological needs of local society and the global trend (100.0% and 90.9% respectively).   On the other hand, nearly seven in ten of other stakeholder groups agreed with this achievement (66.2%, students; 72.2%, parents; 75.4%, school heads; 72.1%, school coordinators) (Figure 3).

Figure 3 Relevance of Applied Learning to the Social, Economic and Technological Needs of Society
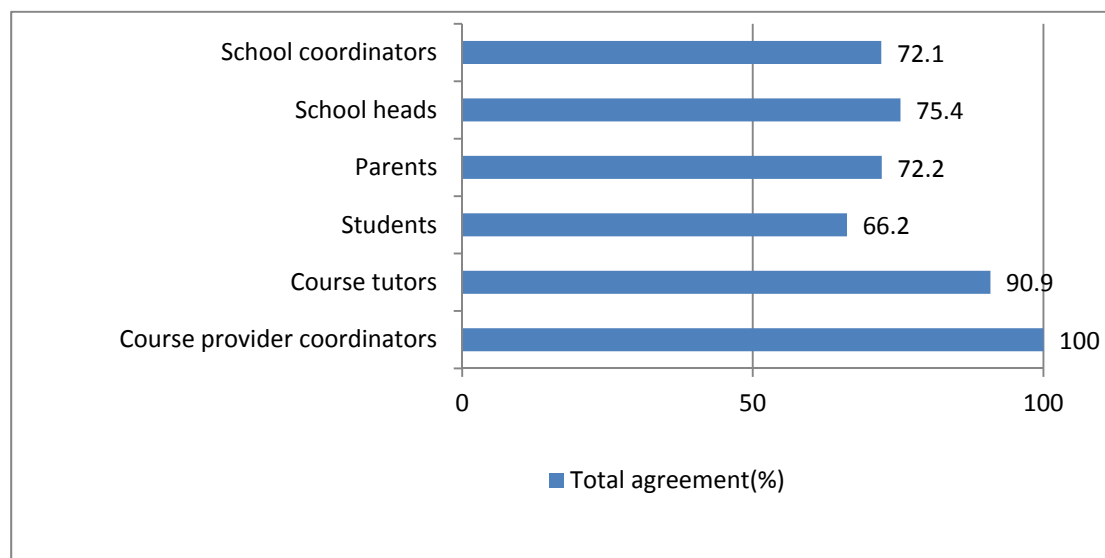
C. PROFESSIONAL DEVELOPMENT OF TEACHERS AND SUPPORT

Extent of Need for Professional Development of Teachers

21. The three stakeholder groups (school coordinators, course provider coordinators, and course tutors) expressed a need[4] for various professional development and support activities.   The most sought after activity was professional development programmes organised by the Education Bureau (73.1%, school coordinators; 91.5%, course provider coordinators; 73.7%, course tutors), followed by collaborative lesson planning (74.5%, course provider coordinators; 73.7%, course tutors) (Table 5).

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[4] "Need on professional development and support activities" referred to the consolidated responses ("extensive", "quite a lot", and "moderate") of the respondents in the corresponding questions.

Table 5   Extent of Need of Professional Development and Support Activities

Extent of Need of Professional Development and Support Activities		Total %	Stakeholder Groups %		
			School Coordin-ators	Course Provider Coordin-ators	Course Tutors
Professional Development Programmes Organised by the Education Bureau	Extensive / Quite a Lot	24.3	16.6	51.1	28.3
	Moderate	51.4	56.5	40.4	45.5
Collaborative Lesson Planning	Extensive / Quite a Lot	21.9	-	17.0	24.2
	Moderate	52.1	-	57.4	49.5
On-site Professional Support	Extensive / Quite a Lot	16.4	-	23.4	13.1
	Moderate	57.5	-	63.8	54.5
Professional Development Programmes Organised by the Hong Kong Examinations and Assessment Authority	Extensive / Quite a Lot	22.8	12.2	59.6	28.3
	Moderate	49.0	55.4	29.8	44.4
Peer Observation	Extensive / Quite a Lot	19.2	-	27.7	15.2
	Moderate	50.7	-	51.1	50.5
Professional Development Programmes Organised by Course Providers	Extensive / Quite a Lot	20.7	13.8	34.0	29.3
	Moderate	48.4	45.8	48.9	53.5

Financial Support

22. In terms of financial resources used by schools on Applied Learning, Diversity Learning Grant (DLG) on average accounted for the largest share (55.0%, school heads).   Some school heads opined that their schools had heavy financial burden or the financial restriction had limited the number of enrolments (4.6%).

D.   FUTURE DEVELOPMENT OF APPLIED LEARNING

Suggestions on Improvement of Applied Learning Courses

23. Different stakeholder groups gave suggestions on improving Applied Learning. While parents would like to see further development in course design and delivery (3.2%), school heads, school coordinators, course provider coordinators and course tutors looked for refinement in administration arrangements (3.6%, 7.5%, 4.3% and 6.1% respectively).

24. Most respondents requested improvement on the recognition and articulation pathways, particularly on,

(a)   Establishing links to the Qualifications Framework;

(b)   Soliciting recognition from tertiary institutions, especially universities; and

(c)   Obtaining recognition from employers in related industries.

Suggestions on New Applied Learning Courses for Future Development

25. Students, school heads and school coordinators opined that new Applied Learning courses could be considered in future. Four in ten students made suggestions on new courses to be added to the future curriculum (39.9%). The top three course areas that they would be interested in were performing arts (5.6%), hospitality services (4.9%) and design studies (4.6%). For school heads and school coordinators, hospitality services was the most popular course area (3.5% school heads; 4.5% school coordinators).

Suggestions on Improving Support

26. Regarding the support for schools, school respondents proposed several areas for improvement in the qualitative survey as below:

(a)   Funding of Applied Learning: The more financial resources were available, the greater number of students the schools could enrol in Applied Learning courses. Some respondents considered full subsidy by the Government on Applied Learning the best approach;

(b)   Communication support: EDB could help strengthen the communication between course providers and schools; and

(c)   Provision of course information from course providers: Taster programmes should present a course overview with clear indication on the proportion of practical tasks and theoretical learning.

CONCLUSION

27. The aims of the Applied Learning curriculum received extremely high level of agreement (over 95%) among relevant stakeholders, with almost all schools (including school heads, 98.8%; school coordinators, 97.0%) agreeing that Applied Learning was able to facilitate diversity in the senior secondary curriculum.

28. Both the quantitative and qualitative survey results show that Applied Learning was overall positively opined by students, parents and school respondents. The majority of schools heads considered the objective of offering diverse learning opportunities to cater for students' learning needs and interests achieved.

29. In addition, there was a very high level of overall satisfaction on Applied Learning (87.3%), indicating that the Applied Learning was well-received by different stakeholder groups.

30. Regarding the impact on students, over eight in ten relevant stakeholders agreed that Applied Learning had positive impact in the majority of aspects relating to students' personal growth, learning, and values and future orientation.

31. With respect to professional development of teachers and support, at least 60% of relevant stakeholders (school coordinators, course provider coordinators and course tutors) expressed need for various professional development and support activities.

32. Concerning the future development of Applied Learning, schools generally took a status quo approach of curriculum implementation, and did not anticipate massive changes until they are well experienced in the New Senior Secondary Curriculum, or until Applied Learning receives better recognition from different parties of society. Most respondents requested improvement on the recognition and articulation pathways.

33. Students, school heads and school coordinators made suggestions on a range of new Applied Learning courses, indicating room for further development and/or addition of courses within the existing six areas of studies of Applied Learning.