Concepts of Setting and Utilizing Student Profile

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Abstract

Student profile data in this study has been collected by Thai teachers for applications in teaching, classroom guidance, and classroom action research. The study’s objectives were: (1) to find out qualities of the questionnaire used for evaluating Thai teachers’ concept of setting and utilizing student profile; and (2) to study the preliminary teachers’ understanding of concept of setting and utilizing student profile. In tryout process, the reliability of this survey research was conducted with 130 and 34 teachers, respectively, selected by sampling selection. The content validated by experienced field experts. The findings suggest that most teachers lacked proper understanding of student profile requirements and implementations. In addition, teachers not only lacked the abilities to apply student data to properly meet the objectives of instruction preparation and teaching, classroom guidance and classroom action research, but they also only showed the moderate behaviors in setting and utilizing student profile.

Keywords: student profile, teaching, classroom guidance, classroom action research;

1. Introduction

Data in student profile in this study has been collected by Thai teachers for applications in instruction preparation and teaching, education guidance, and classroom action research. Student data was continuously collected to analyze and to be used by all educational organizations; furthermore, teachers have controlled the way they use data in their classrooms to support what they believe and to control any change in their classrooms. In their classrooms teachers might adopt the data, which is collected, analyzed, reported and acted on by teachers, to give the possibility to enhance instructional effectiveness and, ultimately, to achieve the positive education reform (Gorlewski, 2011). Although teachers know the importance of student data, they may sometimes ignore to use it.

Thai educational system based on the belief that students have abilities to learn and develop themselves. Therefore, students become the most important resource in the educational system and learning administration should support them to reach their potentials. Unfortunately, the previous study about the student data usages of qualified teachers, having moderate experiences in teaching and classroom action research, suggested that teachers did not well utilize student data and their usages were not in line with their school management’s objectives. To identify their teaching plans, the teachers mainly used only student’s key examination and pretest scores; but they

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trivially used student learning profile or preferred mode of learning. For education guidance, the teachers paid attention on student behavior data and neglected student’s employability data (Kraivixien & Wongwanich, 2012). All of these aforementioned points support that the concept of setting and utilizing student profile is very interesting and should be further developed and applied in learning process management.

2. Literature Reviews

The objective of student profile in this study is to apply it to instruction preparation and teaching, education guidance, and classroom action research. Teachers require prior perception on students’ capabilities, achievement data and interests to develop qualified and effective instruction and curriculum, and to develop action plans that would have a positive impact on their students (Barneveld, 2008). Teachers could obtain a rich and complete picture of what students knew and were able to do by using performance assessment. With these data, teachers could improve the quality of their lessons by creating appropriate and engaging lessons for the concerning students within their learning assessment process. (Oberg, 2009)

In teaching, we concentrated on differentiated instruction as teacher would manage his instructions to suit, correct and fit individual student’s needs, readiness and capabilities. Student’s data such as the knowledge background, group orientation, learning style, intelligence preference, satisfactions, prominent point, weakness, preferred learning environment, academic progression can help the teachers manage their teaching (Tomlinson, 2001; Zaina and Bressan, 2008; Perdue, 2010). Thus the student profile could help teachers to better understand their students; therefore teachers can properly pick up the teaching method, subject matter and classroom management approach for the students. As a result, teachers can apply differentiate their instructions to better fit their classrooms and finally improve the students’ achievement. (Hodge, 1997 cited in Subban, 2006; Tomlinson, 2001; Koeze, 2007; Ferrier, 2007). To enhance the effectiveness of the learning process, teachers can utilize this information in managing their instructions, organizing classroom environment, choosing the teaching approach and contents that best fit the individual or groups of students with similar profiles (Subban, 2006; Tomlinson, 2001).

The objectives of classroom guidance, commonly handles by class teachers and guidance teachers, are: to promote the student’s development and learning experiences, to help students to accomplish their potentials, and to make students understand themselves in the fields of education and career. As a result, students could make correct decisions, solve problems, properly adopt themselves, and have a better life. In Thai elementary schools, classroom guidance must cover 3 areas, namely: 1) education 2) career and 3) personal and social field. (Ministry of Education, 2011)

Classroom guidance promoted students to positive behaviors and attitudes in their schools, better academic achievements, good preparation for future education and career, and positive educational atmospheres. Moreover, the activities and practices which teachers used in classrooms to promote student interaction, collaboration and active participation during learning were a significant factor for developing students’ life skills (Gerler & Anderson, 1986; Lapan, Gysbers & Su 1997; Chan, Lau & Yuen, 2011). Today school guidance and counseling has been changed to differentiation. Differentiated planning and delivery of classroom guidance aimed at meeting the students’ learning needs in the classroom. Teachers providing fundamentally vocational guidance in schools were professionals who utilized the effective way to impact student development (Akos, Cockman & Strickland, 2007).

Teachers utilize action research as a crucial method for promoting students’ learning outcomes and solving teaching problems in the classroom (Fareh & Saeed, 2011; Mertler, 2009; Wongwanich, 2553) Classroom action research commonly starts from teacher’s observation. Therefore, observant teachers perceived that student’s problem behaviors are often a reflection of their unmet needs. (Abromitis, 2010). Classroom research is based on the principles of "naturalistic" inquiry, using collection technique and organizing the student’s learning data. In addition to being context-dependent, it is interactive, multiple-focused, interrelated, formative, and concrete (Kochis, 2008).

Although we could not claim that teacher research alone will resolve the problem of teaching practice, teacher action research became a way to connect research, teaching practice, and schooling policy. Teachers acted “as consumers of research, as researchers of their own practice ...., as designers of their own professional development, and as informants to scholars and policy makers regarding critical issues in the field” (Rust, 2009). Research
involves lots of data, especially student data; therefore the analysis of student profile information would help teachers understand the diversity among students and the possible problems occurring in their classroom.

3. Research Objectives

This study aimed to show that student profile is an attractive tool for teachers to manage instruction, to provide better education guidance, and to find out any possible student’s problem in classroom; and consequently it could increase student developments. Since student profiling is not well-known in Thai learning environment and this is the first phase for searching the needs of setting and utilizing student profile, this research has 2 objectives: 1) to find out qualities of the questionnaire used for evaluating Thai teachers’ concept of building and utilizing student profile; and 2) to study the preliminary teachers’ understanding of concept of building and utilizing student profile.

4. Research Methodology

In educational system, the profiles commonly used are school profile, teacher profile and student profile. This survey research focused only on the student profile applied for teaching, classroom guidance, and classroom action research; and aimed to demonstrate information related to the students’ learning data and behaviors that has been gathered from their teacher evaluation.

4.1. design

This is a survey to assess teachers’ understanding of concept of setting and utilizing student profile to support teaching preparation, education guidance, and classroom action research. The research procedures consist of 1) studying and synthesizing relating documents 2) setting the criteria for measuring concepts of student profile and applying student data to differentiated instructions, classroom guidance, and classroom action research 3) building the qualified tool for measuring the concepts and 4) evaluating the results.

The instrument used in this research was a questionnaire which consisted of 78 questions. The questionnaire gathered 1) the abilities to apply student profile for teaching preparation, classroom guidance and classroom action research 2) behaviors in setting and utilizing student profile 3) classroom behaviors in utilizing student profile; and 4) behaviors in applying student data to classroom action research.

4.2. Samples

The research population was teachers teaching in all standard subjects, which were Thai language; Mathematics; Science; Profession and Technology; Arts; Social Science, Religion and Culture; Linguistic education; and Physical education. The sample size was 130 and 34 teachers selected by sampling technique during the tryout process.

5. Results

5.1. Background data

The samples are mainly female teachers, which is in line with the national teacher database. For the first tryout, the sample size distribution from teaching experience are as follows: above 20 years experience 41.7%; 16-20 years experience 8.7%; 11-15 years experience 12.6%; 5-10 years experience 22.8%; and below 5 years experience 14.2%. Teaching level distribution are; 8.4% of the samples are kindergarten teachers, 46.1% are elementary school teachers, 26.4% are secondary school teachers, and 19.1% are high school teachers. For the second tryout, the sample size distribution from teaching experience are as follows: above 20 years experience 73.6%; 16-20 years
experience 8.8%; 5-10 years experience 8.8%; and below 5 years experience 8.8%. Teaching level distribution are as follows: 38.2% are secondary school teachers, and 61.8% are high school teachers.

Table 1. The sample background

| Sex           | Total | Teaching experience (yr.) | Teaching level | Total |
|---------------|-------|---------------------------|----------------|-------|
| Male          |       | > 5                       | Kindergarten   | 127   |
| Female        |       | 5-10                      | Elementary     | 10    |
|               |       | 11-15                     | Secondary      | 32    |
|               |       | 16-20                     | High school    | 23    |
|               |       | < 20                      | Total          | 121   |
|               |       | 100%                      |                |       |
| 1st tryout    | 36.7  | 14.2                      | 10.4           |       |
|               | 63.3  | 22.8                      | 26.4           |       |
|               |       | 12.6                      | 19.1           |       |
|               |       | 8.7                       | 46.1           |       |
|               |       | 41.7                      | 38.2           |       |
|               |       | 100%                      | 61.8           |       |
| 2nd tryout    | 1     | 34                        | -              | 34    |
|               | 33    | 3                         | -              |       |
|               |       | 3                        | -              |       |
|               |       | 8.8                      | -              |       |
|               |       | 8.8                      | 38.2           |       |
|               |       | 73.6                      | 61.8           |       |
|               | 100%  |                           | 100%           |       |

5.2. Qualities of the questionnaire

The content analysis was done by 5 field experts who have good reputation in classroom action research, research methodology, educational measurement and evaluation, student database of learning information and take-care system, and professional teacher receiving Best Teacher of the Year 2011 Award from Council of Thai Teachers and Education Personnel and from Health Systems Research Institute, respectively. The instrument was adjusted under their recommendations and the overall analysis scores were suited to acceptable criteria

The reliability of the questionnaire was processed twice because, in the first tryout, the finding of the part 2 was lower than the acceptable standard. Therefore, in part 2 some questions were increased in order to have higher reliability scores as shown in table 2. Finally, the instrument qualified in both content validity and reliability.

Table 2. Reliability of the questionnaire

| Part 1: the abilities to apply student profile | First tryout | Second tryout |
|---------------------------------------------|--------------|---------------|
| 0.8928                                      | 0.9073       |
| Part 2: behaviors in setting and utilizing student profile | 0.6432       | 0.7595       |
| Part 3: classroom behaviors in utilizing student profile | 0.8296       | 0.8051       |
| Part 4: behaviors in applying student data to do classroom action research | 0.9297       | 0.9511       |
| - to analyze student’s learning problems     | 0.9486       | 0.9119       |
| - to find out the causes of student’s learning problems | 0.9608       | 0.9396       |

5.3. Concepts of setting and utilizing student profile

5.3.1. Abilities to apply student profile for teaching, classroom guidance and classroom action research

The findings in both tryout processes were similar and showed that roughly 10% of teachers had scores more than half, as shown in table 3 and figure 1; therefore, the findings suggest that most teachers could not properly apply student data to meet the objectives of instruction preparation and teaching, classroom guidance and classroom action research. These findings also implied that most teachers had low abilities to correctly apply student data to teaching, classroom guidance and classroom action research.

Table 3. Teacher abilities to apply student profile

| Correct scores | First tryout | Second tryout |
|----------------|--------------|---------------|
| 8 and lower    | 116          | 30            |
| 9-17           | 14           | 4             |
| Total          | 130          | 34            |

Figure 1. The similarity of the scores
5.3.2. Teacher behaviors in setting and utilizing student profile

The findings revealed that, in the second tryout, the mean score of their overall behaviors were equal to 3.136. This score suggested that teachers had moderate behaviors in setting and utilizing student profile for teaching, classroom guidance and classroom action research. This result might indicate that teachers have inadequately understood the concept of setting and utilizing student profile.

For complete information, we should find out the needs required to improve their concept. The needs were calculated by modified Priority Needs Index (PNI\textsubscript{modified}) which was developed by Prof. Nonglak Wiratchai and Prof. Suwimon Wongwanich (Wongwanich, 2007). The priority to improve needs were: first, setting and applying student profile; second, utilizing student profile for teaching; third, utilizing student profile for classroom guidance; and last, utilizing student profile for classroom action research. The details were in Table 4.

| Table 4. Behaviors in setting and utilizing student profile |
|------------------------------------------------------------|
| Mean of what should be (I) | Mean of what is (D) | (I-D) | (I-D)/D | Priority |
| setting and applying student profile | 4.5 | 2.585 | 1.915 | 0.741 | 1 |
| utilizing student profile for teaching | 4.5 | 3.044 | 1.456 | 0.478 | 2 |
| utilizing student profile for classroom guidance | 4.5 | 3.539 | 0.961 | 0.272 | 3 |
| utilizing student profile for classroom action research | 4.5 | 3.774 | 0.726 | 0.192 | 4 |

5.3.3. Teacher classroom behaviors in utilizing student profile

In classroom teacher normally paid attention to teach, but the findings showed that in both tryout teachers mainly used student profile to provide classroom guidance. In the first tryout they used student data to provide classroom guidance, to do classroom action research, to teach, respectively; while in the second tryout they applied student data to provide classroom guidance, to teach, to do classroom action research. The details questionnaire results are in table 5.

| Table 5. Teacher behaviors in classroom (shown as mean scores) |
|---------------------------------------------------------------|
| Using student profile for | Teaching | providing classroom guidance | classroom action research |
| First tryout | 3.8264 | 4.1298 | 3.9018 |
| Second tryout | 3.9168 | 4.0600 | 3.8756 |

5.3.4. Behaviors in applying student data to do classroom action research

This part measured how well teachers use student profile to process classroom action research in different situation. The behaviors results shown in mean scores are in table 6. The findings from both tryouts were similar and suggested that in both tryouts teachers only moderately applied student data to process the research.

| Table 6. Behaviors in applying student data to do classroom action research |
|---------------------------------------------------------------------------|
| Situations | First tryout | Second tryout |
| to analyze student’s learning problems | 3.0890 | 3.2012 |
| to find out the causes of student’s learning problems | 2.9630 | 3.1644 |
| to develop the student’s problem solving | 3.1420 | 3.1953 |
6. Discussions

Firstly, the questionnaire qualified in both content validity and reliability. Although the reliability of the first tryout was lower than the suitable criteria, some questions were added to the questionnaire. Finally, the reliability of all parts were higher than 0.7 and consistent with Kerlinger & Lee (2000) who showed that Alpha value of 0.7 and above is claimed as the evidence of reliability. The content was validated by 5 well reputable and experienced field professionals.

Secondly, the findings suggested that most teachers lacked both the abilities to apply student data to properly meet the objectives of instruction preparation and teaching, classroom guidance and classroom action research; and the behaviors in setting and utilizing student profile. Furthermore, teachers only moderately applied student data to process the research. These would support the observation that most teachers had low understanding in the concepts of setting and utilizing student profile. The findings were not in line with the new kind of learning, which applies differentiated instructions and classroom guidance to better fit their classrooms. Therefore, these findings were not consistent with Tomlinson (2001) Ferrier (2007) and Akos, Cockman & Strickland (2007). Both shortfalls would adversely affect the students’ achievement.

Thirdly, although classroom research provides essential information that helps teachers solve learning problems, the findings showed that teachers only moderately applied student data to process the research. In addition, teachers also had insufficient abilities to correctly apply student data to classroom action research. As a result, teachers would miss the opportunity to improve to students’ achievement as mentions by Fareh & Saeed (2011), Mertler (2009) and Wongwanich (2010).

Lastly, when looking at classroom problems for which teachers really needed to have answers, the findings showed that teachers had only moderately applied student data to process the research. It is therefore reasonable to believe that teacher’s limitation in utilizing class room information to improve their students’ achievement and to improve their teaching effectiveness still remains and will continue; because teachers do not properly apply their in hand data to find out the ways to resolve those problems. These teacher’s behaviors were not consistent with the result of Gorlewski (2011) that if teachers keep maintaining their professional status, they must adopt classroom data by collecting, analyzing, reporting, and utilizing it to enhance instructional effectiveness.

7. Conclusion

Most teachers lacked proper understanding of student profile requirements and implementations. In addition, teachers lacked not only the abilities to apply student data to properly meet the objectives of instruction preparation and teaching, classroom guidance and classroom action research, but they also only showed the moderate behaviors in setting and utilizing student profile. The key areas for improvements are: setting and applying student profile; utilizing student profile for teaching; utilizing student profile for classroom guidance; and utilizing student profile for classroom action research, respectively.

8. Recommendations

The gathering of student learning information and its application in instruction, classroom guidance and classroom action research has been proven to be effective in improving student academic achievement. To strengthen education system, building the right concepts of student profiling and its application for every teacher would be an excellent method to empower them. The organizations that are responsible for educational system should develop the processes of training, mentoring system or research to support this concept into teacher’s learning society and follow up the results.

The next research should collect enough representatives thoroughly in Thailand to receive the correct results of setting and utilizing student profile. If teachers clearly understand the concept of student profile and properly apply
student data in their works, it would help them reduce their bounds. The correct results would help related parties develop the plan to increase teacher’s concept of student profile.

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