

Article

Vocational English Assessment in Senior Secondary Vocational Schools in China

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Abstract

This paper addresses the topic of English assessment in senior secondary vocational schools in the Chinese mainland. Studies are reviewed concerning the implementation of the concept of assessment proposed in the national syllabus issued in 2009. With reference to the concept of assessment in the 2009 *Syllabus* and the 2020 *Curriculum*, an online questionnaire survey was conducted to investigate the practice of assessment in senior secondary vocational schools in China. Sample tests used in senior secondary vocational schools were drawn upon to provide evidence for the practice of assessment. Findings from this study indicate that a shift has been made from traditional assessment of learning to assessment *for* and *as* learning. The integrated model of assessment proposed in the *Syllabus* is commonly practised. Some other models like multiple assessment and credit substitution assessment are also adopted in some middle schools. Diverse evaluation criteria are adopted, multiple methods of assessment are employed, students and stakeholders are participating in assessment as agents. Teachers are using formative assessment to support teaching and learning. Innovation can also be found in summative assessment, in which performance tasks are designed, authentic materials adopted, and real-life/vocational contexts provided for measuring students' ability to use language to do things.

Keywords

Vocational English assessment, core competencies, integration of formative assessment and summative assessment, performance assessment

1 Introduction

In China, senior secondary vocational education refers to the education after 9-year compulsory education, and is in line with senior general education. In 2009, the *English Teaching Syllabus for Senior Secondary Vocational Education* (referred to as 2009 *Syllabus*) was issued ([Ministry of Education, 2009](#)). To cater for the demand of social development, the Ministry of Education of China initiated a project to develop *Curriculum Standards for Vocational English* (shortened to the *Standards* in the following) based on the 2009 *Syllabus*, which was released in 2020. According to the 2009 *Syllabus*,

senior secondary vocational English instruction is expected to “cultivate students’ ability to use English to do things in everyday and vocational contexts, and at the same time, to foster learner autonomy, culture consciousness, professional ethics, affect and sense of worth” (Ministry of Education, 2009, p.1), which were developed into four key competencies in the *Standards*. To ensure the attainment of these objectives, the 2009 *Syllabus* proposed integration of formative assessment and summative assessment with an emphasis on formative assessment. Since the issue of the *Syllabus*, increasing numbers of studies have been conducted to study and practice the concept of assessment proposed in the *Syllabus*. However, few studies have been conducted to investigate the current situation of vocational English assessment in China. Thus, questions have to be addressed about how the concept of assessment proposed in the *Syllabus* is currently being practiced in senior secondary vocational schools in different regions of China.

2 Literature Review

The past decade has witnessed a great number of studies in vocational English assessment. Some of these studies are mainly illustrative of the concepts of assessment prescribed in the 2009 *Syllabus* (Du, 2012; Zan, 2015) or theoretical exploration based on the syllabus (Wang, 2011; Zhao, 2010). There are studies that explore the construction of an evaluation system. There are also studies which describe the implementation of formative assessment or portfolio assessment. Several survey studies can also be retrieved (<http://www.cnki.net>), which were aimed to reveal the status quo of assessment in senior secondary vocational schools. The following review will describe the studies to provide a general line of study and provide the background for the present study.

2.1 Studies of models of assessment

Studies on the construction of evaluation systems can fall into three categories in terms of the models of assessment they propose, namely, integrated assessment, credit substitution assessment, and multiple assessment.

2.1.1 Integrated assessment

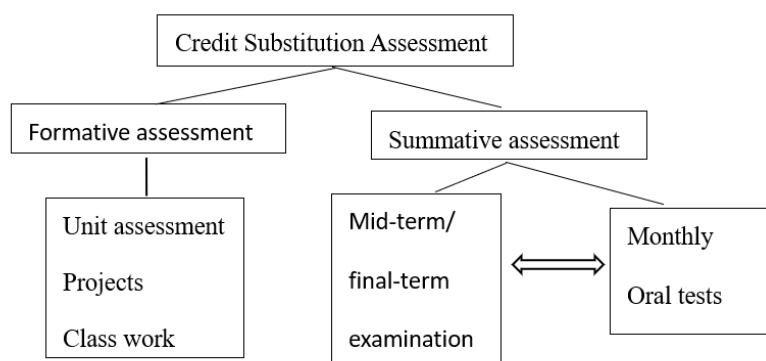
Integrated assessment is used here to refer to the type of assessment described in the 2009 *Syllabus*, that is, the integration of formative assessment and summative assessment. Since the issue of the *Syllabus*, many studies have been conducted to study the operation and effectiveness of this model of assessment (Li F., 2013; Liang, 2012; Lu, 2011; She, 2012; Zan, 2015). Most of these studies adopted an experimental approach, with summative assessment adopted in the control group, and both summative assessment and formative assessment adopted in the experimental group. The weighting of formative assessment in the final course evaluation accounted for up to 70% of the marks available (Li F., 2013; She, 2012; Wu, 2011). These studies maintained the traditional mid-term examination and final-term examination for summative assessment (Li F., 2013). For formative assessment, a variety of techniques were applied, including classroom participation, assignments, self-study, unit tests, quizzes and portfolios. Checklists were also employed in some studies for students to assess themselves and their group members in listening, speaking, reading and writing tasks (Lin, 2013). Peer assessment and self-assessment were encouraged in these studies. Pre-tests and post-tests were adopted to validate the effects of intervention. Questionnaires and interviews were employed for data collection. Statistics from these studies indicated that the experimental groups performed better than the control groups in terms of learning achievements. The studies revealed that the combination of formative assessment and summative assessment did help to promote learners’ interest, self-confidence and cooperation.

2.1.2 Credit substitution assessment

Credit substitution assessment was so termed because students were allowed to substitute their performance in reading and writing in the summative assessment for their performance in monthly oral tests (Figure 1). This type of assessment was first experimented in a vocational school in Beijing with eight classes as subjects (Wang, 2010). Though the evaluation system was composed of formative and summative assessment (Figure 1), students were allowed to choose either an oral test or a reading & writing test to demonstrate their language achievement for their credit [Note 1]. The study adopted questionnaires, interviews, and classroom observation methods. Results show that a majority of the students were supportive of the model of assessment (*ibid*). They reported that this type of assessment was effective.

Figure 1

Credit Substitution Assessment



2.1.3 Multiple assessment

Multiple assessment, according to many Chinese researchers, refers to assessment which adopts diversity of the criteria of evaluation, and diversity of content, agents and tools. It is argued that social requirements for vocational students are diverse, and different occupations might require different skills and academic knowledge. For example, pre-school education, computer education and tourism education might require quite different skills and academic abilities. Therefore, the outcome assessment of vocational students should be correspondingly different (Tong, 2018). There are studies on the diversity of assessment from different aspects, but most studies focused on multi-evaluation agents, arguing that enterprises, communities and management staff should participate in evaluation of students' learning process and learning achievements (Jia, 2012; Lin *et al*, 2011).

2.2 Studies of formative assessment

Review of literature shows that the majority of the studies in the past ten years focused on formative assessment. Some studies discussed the use of formative assessment in classroom instruction (Du, 2012; Zhu, 2017), but most studies adopted experimental approaches to study the effect of formative assessment on development of verbal and non-verbal competencies. Most studies involved the design of control groups and experimental groups, with pre-tests and post-tests as instruments (Feng, 2015; Liu, 2016; Yang, 2018). A variety of techniques were employed for data collection for validation of the study, including classroom observation, questionnaires, interviews and documents, such as students' notes and learning journals.

Some studies examined the effectiveness of formative assessment in vocational English instruction in general (Shi, 2018; Song, 2017). Other studies focused on the influence of formative assessment on students' non-linguistic dispositions, like attitude, learning strategies, learning ability, motivation and even self-efficacy (Feng, 2015; Fu, 2012; Su, 2011). But most studies focused their research on the improvement of specific skills, mostly listening (Liu, 2016), speaking (Liu, 2016; Zhu, 2017), and writing (Yang, 2018). It seemed that all these studies without exception showed that formative assessment significantly improved students' language skills and produced positive influence on students' attitude, learning ability, and cooperation. It also raised students' motivation, and enhanced their self-efficacy.

Most commonly used tools of assessment are classroom performance, hand-copy work, unit study reports, achievement reports, daily self-assessment reports, in-class quizzes, and portfolios (Xia, 2010). As one technique of formative assessment, the portfolio attracted the attention of many educational practitioners. It was found that portfolio assessment was able to enhance the development of students' learning ability (Tang & Meng, 2017).

2.3 Studies of portfolio assessment

Many teachers conducted experiments with portfolios to motivate students, and to improve their language knowledge, skill, affect, attitudes and cooperation (Lin, 2013; Zhao, 2018). Students were asked to upload their classroom performance, daily English reports, oral presentations, group assessment rubrics, interim test reports, recording of oral presentations, speech and self-reflections online. They were also encouraged to upload anything they read, listened to or created during the process of learning, including English songs, videos, posters, writings and projects (Lin, 2013). Findings from the studies showed that with portfolio assessment applied in listening, speaking, reading and writing, students improved significantly in motivation, self-confidence, learner autonomy and language ability (Zhao, 2018).

2.4 Survey studies of assessment

Since the issue of the 2009 *Syllabus*, a number of survey studies have been conducted to investigate the operation of assessment in senior secondary vocational schools. These studies either concentrated on assessment across disciplines or focused on specific regions or middle schools. It was found that there was a great variation in the operation of assessment in different regions.

Survey studies showed that most schools adopted the model of formative assessment plus summative assessment, for example, vocational schools in Lianyuangang and Taiyuan (Qi, 2015; Wu, 2011). However, in some regions like Chongqing city, the teachers stated that there was no planned systematic assessment system (Lin *et al.*, 2011). Though some schools adopted various instruments for formative assessment, for example classroom participation, assignments, quizzes, traditional standardized tests still dominated summative assessment, focusing on knowledge and grammar (Qi, 2015). In some places such as Guangdong Province, achievement assessment was administered once a year, but there was no unified evaluation scheme to follow (Xiang & Ou, 2019). In some places like Chongqing, summative assessment mainly focused on students' professional ethics, value and affect, with less attention on academic achievement in different courses (Lin *et al.*, 2011). In many regions, multiple assessment was not in place either. In most regions, assessment was solely conducted by teachers, ignoring students' subjective roles in assessment (Lin *et al.*, 2011; Qi, 2015). The role of enterprises and their requirements were ignored too. Many enterprises claim they should participate in achievement assessment of students (Lin *et al.*, 2011). Many teachers also claimed that enterprises, parents and other stakeholders should assume responsibility of assessment (Xiang & Ou, 2019). There were also suggestions that different criteria of evaluation and different levels of tests should be provided to cater for the diverse needs of students.

2.5 Literature review: summary and evaluation

A great number of studies have been conducted since the issue of the *Syllabus*, including theoretical and empirical studies. Though experimental studies all showed fruitful results in the practice of assessment, survey studies provided counter evidence that the concept of assessment was not well practised in senior secondary vocational schools in China.

3 Conceptual Framework

To investigate how the types of assessment prescribed in the *Syllabus* are being practised in secondary vocational schools, there is a need to construct a conceptual framework to elaborate on the concepts. In the following part, the concept of assessment in the *Syllabus* will be described, and relevant theories will be reviewed to form a basis and reference for the investigation.

3.1 Basic concepts in assessment

3.1.1 Assessment and evaluation

Assessment and evaluation are two terms that will be used throughout this study. There is a necessity to clarify what is meant by each term. Assessment, as held by many scholars, is the process of gathering evidence of student learning to inform instructional decisions (Burke, 2010, p.19). Evaluation is the procedure for making a judgment based on the evidence collected through assessment (Feng, 1995; Lu & Wang, 2005). This study also adopts this concept of assessment and evaluation.

3.1.2 Formative assessment and summative assessment

Assessment may be categorized into different types based on different criteria. According to the purpose and function that assessment performs in teaching and learning, assessment can be classified into two categories: formative and summative.

Formative assessment serves the purpose of providing information for teachers and learners. It is treated as “a way to improve the calibre of still underway instructional activities” (Popham, 2008, p.4). In contrast, summative assessment “informs the stakeholders about how well teachers and students have performed” (Burke, 2010, p.21). It is used as “a way to determine the effectiveness of already-complete instructional activities” (Popham, 2008, p.4). Formative assessment occurs in the process of learning and teaching, while summative assessment occurs at the end of a chapter, a unit of study, a benchmark period, a course, a semester, or an academic year. Formative assessment usually draws upon informal techniques like conversations with students, class interactions, questioning, observation, interviews, as well as more formal techniques like quizzes, performative tasks, and portfolios to monitor student progress and modify instruction accordingly (Ataya, 2007). Summative assessment is usually conducted in the form of a mid-term or final-term examination.

3.1.3 Assessment for learning, of learning and as learning

Usually, summative assessment is referred to as *assessment of learning*, as it is used to certify learning and report to parents and students about students’ progress and achievement in school (Earl, 2013, p.28). Mid-term examinations, final-term examinations, even unit tests, quizzes all belong to assessment of learning.

When evidence from assessment is used to help teachers modify the teaching or support student learning, assessment becomes *assessment for learning*. Assessment for learning shifts the emphasis from making judgments to creating descriptions that can be used in the service of the next stage of learning (*op.cit.*, p.27).

Different from assessment for learning, *assessment as learning* emphasizes using assessment as a process of developing and supporting metacognition for students (Earl, 2013, p.28). When students can monitor their learning processes and use the feedback from this monitoring to make adjustments, adaptations, and even major changes in what they understand, assessment as learning occurs.

3.1.4 Validity, reliability and fairness

For any test or assessment to be effective, three principles must be observed: validity, reliability and fairness.

Validity is the most fundamental consideration when we develop an assessment task. It can be characterized as how well an instrument can “fulfil the function for which it is going to be used” (Hopkins, 1998, p.72). Validity of an assessment is therefore decided by the use it is put to. For summative assessment, we need to pay attention to its construct validity, content validity and criterion validity as well as face validity, making sure that the assessment, for example, the final-term examination, can assess the type of competencies prescribed in the syllabus. If it is formative assessment, we need to pay more attention to “consequence validity” (Borich & Tombari, 2004, p.63), that is, whether the tools we adopt lead to the changes we want, for example, motivating the students, increasing student participation and the like.

Reliability refers to the reliability or consistency of the results of evaluation (Wang, 2007, p.52). It describes the precision with which assessment results are reported, or the consistency of measurement when the testing procedure is repeated on a population of individuals or groups (Caffrey, 2009). The number of samples, items, vague directions, scoring and so on may all affect the reliability of assessment.

A valid assessment might suffer bias due to the diversity of the candidates. Bias can arise when cultural or linguistic factors influence the candidates’ performance. All assessments must make sure that students with the same knowledge, skill, or ability register the same performance. *Fairness* of assessment then may be represented as lack of bias, equitable treatment in the testing process and equality in outcomes of testing (ERA et al., 1999).

3.2 Assessment advocated in the Syllabus and Standards

Both the 2009 *Syllabus* and the 2020 *Standards* propose new course objectives for vocational middle school students. To help learners attain these course objectives, both proposed guidelines for assessment and evaluation. In the following part, the key concepts of assessment proposed in the *Syllabus* and the *Standards* will be introduced.

3.2.1 Integration of summative assessment and formative assessment

Previous studies all suggest that the integration of both formative assessment and summative assessment is essential for the attainment of course objectives. Assessment is more than just an index of school success (Burke, 2010). The 2009 *Syllabus* also explicitly states that assessment in secondary vocational school education should “follow the principle of integration of summative assessment and formative assessment” (Ministry of Education, 2009, p.8). At the same time, the *Syllabus* emphasizes the role of formative assessment in the course, stating that,

The purpose of vocational English assessment is to provide feedback to teachers and students through assessment of the learning process and learning achievements, to help teachers adjust their instruction, and promote student development. Assessment should highlight its diagnostic and guiding functions, and incentive effects. (op.cit., p.8)

3.3 Balanced assessment between assessment for, of and as learning

As Stiggins *et al.* (2004, p.25) state, “a balanced assessment system takes the advantages of *assessment of learning and assessment for learning*”. To ensure the attainment of educational objectives, there is need for assessment to inform, support and enhance learning instead of simply certificating learning.

Assessment as learning is also advocated in the *Syllabus* and the *Standards*. The *Syllabus* requires the coordination of teacher assessment, student self-assessment and peer assessment, which is reinforced in the *Standards*. Students are encouraged to monitor what they are learning and use the feedback to make adjustments, adaptation, and even changes in what they learn to become autonomous learners and critical thinkers.

3.4 Performance assessment based on real contexts

Performance assessment draws upon performance tasks which require students to construct, rather than select, responses (U.S. Congress, Office of Technology Assessment, 1992). In performance tasks, students demonstrate their knowledge, skills, and problem-solving abilities as they apply what they have learned in the context of an authentic task (Burke, 2010, p.52). Performance tasks can thus be used to assess how well product meets the standards and the process students use to complete the product or performance.

The term “performance assessment” did not appear in the 2009 *Syllabus*, which only recommended authentic tasks for assessment. In the 2020 *Standards*, performance assessment is officially proposed as a method of assessment, as can be seen from the following citation.

Apart from the paper-and-pen tests, summative assessment should adopt performance assessment and ensure assessment be administered in authentic contexts and based on real meaning, shifting the focus from knowledge-based assessment to competency-oriented assessment. (Ministry of Education, 2020, p.22)

3.5 Multiple assessment to ensure attainment of objectives

While the *Syllabus* advocated diverse criteria, agents and assessment instruments, the *Standards* states in black and white that vocational school assessment should adopt “multiple assessment” to ensure the attainment of course objectives (Ministry of Education, 2020, p.22). Multiple assessment, as most Chinese scholars so put it, refers to multiple methods of assessment (Li, 2003). Wang (2007) expands the concept of multiple assessment to include diversity of assessment in terms of content of evaluation, criteria of evaluation, agents of evaluation and application of evaluation result in addition to multiple methods of assessment. This is explicitly stated as requirements in *Syllabus* and the *Standards*.

The *Syllabus* suggested a three-level course requirement for graduation. Different schools in different regions can choose different levels as the required outcomes for their students. Teachers are required to provide differentiated learning for different learners. They are supposed to acknowledge the differences between different learners and provide choices for them to cater for individualized development. For example, they can provide remedial instruction for poor language learners and extended instruction for

excellent learners, making sure that every student can achieve what they can in vocational education (Ministry of Education, 2009, p.3). This sets different criteria for the summative assessment of students' course achievement.

The 2009 *Syllabus* advocates a learner-centered approach to classroom instruction. Considering the learners' differences in language proficiency, schema, and learning ability, classroom assessment should also take into consideration learners' differences and set different criteria for summative assessment. This may imply that teachers are not supposed to use uniform criteria to assess all learners. They are to provide different tests for learners who are supposed to achieve different levels of course objectives.

3.6 Framework for investigation and data analysis

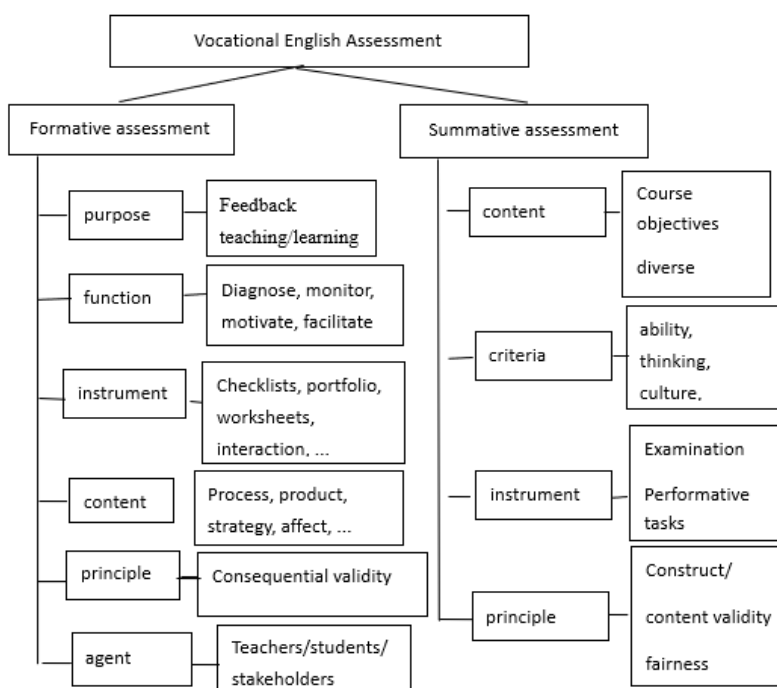
The following framework (Figure 2) is constructed with reference to the theories of assessment and the course requirement prescribed in the *Syllabus* and the *Standards*. As explained above, vocational English assessment consists of formative assessment and summative assessment, each serving different purposes.

The main purpose of *formative assessment* is to provide feedback for teaching and learning, fulfilling the function of diagnosis, monitoring, motivating and facilitating. Though the *Syllabus* suggested some weighting of formative assessment in the course evaluation, students' performance in formative assessment should not be counted in the final score of students' course evaluation (Linn & Gronlund, 2003: 34). The operation of formative assessment should abide by the principle of consequence validity.

Summative assessment, which provides evidence for the final value judgment, might take the form of a mid-term or final-term examination, and should follow the principle of construct validity and content validity. That is to say, it should assess students' ability of communication in vocational contexts, rather than merely a knowledge of grammar and vocabulary. It should cover the content of the course, including verbal and non-verbal competencies. To assess communicative competence, there is a need for performative tasks, or tasks in authentic contexts. Considering the diverse features of the students, summative assessment should be multi-criteria based.

Figure 2

Framework for Investigation



According to the *Syllabus* and the *Standards*, both formative assessment and summative assessment should involve multiple agents of evaluation. Students should be encouraged to conduct self-assessment, peer assessment or group assessment. Stakeholders, especially relevant enterprises should participate in students' assessment.

The questions in the survey were formulated with reference to this framework. Survey responses will also be interpreted within this framework.

4 Study Method

4.1 Study objectives

This study is aimed at investigating the operation of assessment being practised in senior secondary vocational schools in China, to see whether the concept of assessment proposed in the *Syllabus* is well implemented and what problems there might exist with the current assessment practice.

4.2 Sampling

This study adopted simple systematic sampling to ensure the generalizability of the findings. The survey took advantage of modern technology and invited 10 teaching and research coordinators in eight provinces and two cities to choose respondents. It was required that no more than two teachers from each school were to participate in the survey. According to the online statistics, respondents visited the questionnaire 1629 times, providing 735 valid responses, with 93.7% as teachers. Their responses to the questions in the survey can reveal the status quo of assessment in senior secondary vocational schools in China.

4.3 Data collection

The present study drew on three sources for data collection: questionnaire, cases of instructional design from a national instructional design competition, and sample tests.

4.3.1 Questionnaire

This study adopted an online questionnaire as the main technique for data collection. The questionnaire was designed with reference to the framework of evaluation. The questionnaire is composed of three parts with 27 questions, covering both formative assessment and summative assessment. The questions are divided into two sections according to the type of responses. One part contains 12 questions which permits multiple keys, mainly concerning the content, instrument, agents, and feedback of formative and summative assessments. The other part contains 15 five-scale questions, ranging from absolutely no to absolutely yes. The respondents are required to read the questions and make their choice according to how the description of operation of assessment agrees with their practice. The 15 questions can be categorized into five parts, content of assessment, type of tasks, criteria of evaluation, agents of evaluation, instruments of assessment, and application of assessment evidence. This part is intended to check whether authentic tests, performance tasks, and authentic real-life/vocational contexts are used in summative assessment; whether students' diversity is considered, whether students and stakeholders' subjective roles in assessment are actualized, and how assessment evidence is utilized to support learning and teaching.

4.3.2 Document of achievement tests

Sample tests were collected from different provinces to aid the analysis of summative assessment in senior secondary vocational schools in China. Altogether 10 sample tests were obtained, each of which was analysed with reference to the framework. Analysis of the tests mainly covers type of questions and tasks, content of evaluation, construct and criteria of evaluation.

5 Findings and Discussion

Data collected from the questionnaire was analysed with SPSS 20.0 In the following part, findings from the questionnaire survey will be presented and discussed. Data from the sample tests and national instructional design competition will be drawn upon to support the findings and discussion.

5.1 New models of assessment being practised

Former survey studies seem to suggest that the integrated model of assessment is not commonly practised in many vocational schools. Data from the survey, however, indicate that in most regions, the integrated model is now being practised. Over 58% of the respondents claim that they are implementing the model of formative assessment plus summative assessment (Table 1). Other models of assessment, like multiple assessment and credit substitution assessment are also being practiced in nearly one quarter of the vocational schools.

Table 1

Models of Assessment

		Responses	
		N	Percent
Models ^a	Integration of formative assessment and summative assessment	632	58.5%
	Multiple assessment	199	18.4%
	Credit Substitution Assessment	192	17.8%
	Others	57	5.3%
Total		1080	100%

5.2 Formative assessment receiving more attention

5.2.1 More value assigned to formative assessment

The review of the research literature shows that there are schools which assign 50% - 70% weighting to formative assessment (Li, 2013). This is confirmed in the present survey, which shows that 69% of vocational schools are giving more than 40% to formative assessment (Table 1). When students can get the mark by just attending the lesson, or finish the homework (Table 2), this implies that students can pass so long as they can come to class and finish the assignment even if they fail the achievement test. If this is true, it is very difficult to ensure the quality of education.

As is acknowledged, the purpose of formative assessment is not for making judgments about students' course achievement. It is wrong to assign formative assessment any value in the final achievement (Linn & Gronland, 2003, p.34). One way to use formative assessment to the full is to treat formative assessment

as qualifying assessment. That is, only if students attain a certain ranking in formative assessment do they have the qualification for final achievement assessment, which is the only index of success. This has already been proved to be a scientific and effective mechanism of assessment (Chu, 2017).

5.2.2 A variety of techniques being employed for formative assessment

This section discusses the instruments that Chinese vocational school teachers adopt for formative assessment. This survey included 11 commonly used techniques in the questionnaire, and it is found that classroom interaction, quizzes and lesson attendance check are ranked the highest (Table 2). It shows that teachers pay more attention to students' achievement and their classroom participation. Classroom assessment was receiving more attention at least during the questionnaire period. However, due to the high weighting of lesson attendance check, formative assessment might suffer low consequence validity. Most teachers adopt lesson attendance check as a major technique because Chinese vocational school students tend to skip lessons. But there are studies which show that checking lesson attendance is powerless in motivating students' participation (Wang, 2010). Allocating any weighting to lesson attendance is meaningless and even harmful to students, which too many teachers are not aware of. It's better to substitute it with classroom participation.

To monitor student participation in classroom, worksheets may be more useful than the attendance check, but only 33.2% of the respondents report that they will design classroom worksheets. For students to monitor and support their own learning, checklists are more valuable (Belgarad et al., 2008; Burke, 2010, p. 81). Only 26.8% of the respondents, however, chose checklists as the technique for formative assessment (Table 2). While portfolios can help students become aware of their own progress, this study shows that portfolios are the least used instruments (11.7%).

Table 2

Instruments Used in Formative Assessment

Instrument	Responses	
	N	Percent
Lesson attendance	593	14.3%
Classroom interaction	660	15.9%
Quizzes	650	15.7%
Classroom worksheet	244	5.9%
Checklists	197	4.8%
Classroom observation	487	11.8%
Learning logs	185	4.5%
Peer assessment	300	7.2%
Practical activity	348	8.4%
Projects	320	7.7%
Portfolio	86	2.1%
Others	72	1.7%
Total	4,142	100%

Analysis of data shows that not many schools are adopting practical activities or projects (Table 2). However, teachers are becoming more aware of the importance of such kind of assessment tasks. Analysis of teachers' instructional design in the competition confirms these findings which revealed that many contestants can design activities which involve learners in group work to create lunch menus, design posters, make videos, or write articles for a school newspaper.

5.2.3 Formative assessment focusing on learning

To inform teaching and learning, formative assessment should focus on the students' learning process. Data from the survey shows that vocational school English teachers could focus their assessment on students' performance and how students approach learning (Table 3). They could base their feedback on students' participation in classroom activities (87.2%). The majority of the respondents (88.2%) report that they could also draw on interim tests, like quizzes, unit tests and performance tasks to make judgement about students' progress, or how well they attain the interim objectives.

Table 3

Content of Formative Assessment

		Responses	
		N	Percent
Content	Students' learning performance	679	28.1%
	Students' progressive learning achievements	648	26.8%
	How students approach learning	329	13.6%
	Participation of students	641	26.6%
	Others	117	4.8%
Total		2414	100%

5.2.4 Descriptive feedback being practised

There are scholars that argue that feedback is "the heart and soul of formative assessment" (Burke, 2010, p.21). Feedback can be evaluative or descriptive. Data from this survey shows that evaluative feedback is still prevailing among Chinese vocational school teachers (Table 4). But the greatest benefits from feedback occur when students receive feedback related to how to do a task more effectively (O'Connor, 2009). This requires descriptive feedback to be provided, which acknowledges students' performance, provides guidance, and encourages further effort. However, statistics from this study shows that many teachers (50% - 56%) are commenting on students' shortcomings and giving suggestions for improvement (Table 4). That is, many teachers are not just providing feedback, but providing "guidance", as O'Connor (2009, p.25) puts it, about what students should do to improve.

Table 4

Formative Assessment Feedback Types

		Responses	
		N	Percent
Feedback	Ranking	411	18.3%
	Mark	611	27.2%
	Simple comments. e.g., "Good" "Well-done"	388	17.3%
	Comment on shortcomings	413	18.4%
	Description with suggestions for improvement	370	16.5%
	Others	51	2.3%
Total		2244	100%

5.2.5 Formative assessment being used to aid teaching and learning

Formative assessment should help diagnose, monitor and scaffold student learning. When asked whether they could provide suggestions for students to facilitate their learning, whether they could modify their instructional design according to their formative assessment, over 90% stated that they could. Though it is not known what suggestions teachers give, and how they modify their instructional design, the awareness of vocational English teachers is a good sign of assessment development in vocational schools in China.

5.3 Multiple assessment being accepted

As discussed in the literature review and framework, the concept of multiple assessment is acknowledged by Chinese scholars and teachers as a model of assessment. The present study shows that this concept of multiple assessment is now being accepted by more and more teachers.

5.3.1 Students and social organizations participating in evaluation

Though 99% of the respondents agree that the teacher should be the agent of evaluation (Table 5), it does not mean teachers are the sole agent of evaluation. Students and social organizations are participating in evaluation. Around half of the respondents claim they can organize self-assessment, peer assessment or group assessment. However, few internship organizations could participate in evaluation. It is not that the enterprises do not want to take charge of the assessment (Lin et al., 2011). The problem lies with the vocational schools' decision making departments. It is the school not the enterprises that decide whether they could participate in student evaluation. So long as the vocational schools give the right back to the enterprises, the current situation of vocational school assessment can be improved.

Table 5

Evaluation Agents

		Responses	
		N	Percent
Agent	Teachers	728	44.6%
	Individual students	315	19.3%
	Peers or groups	481	29.5%
	Internship organization	108	6.6%
Total		1632	100%

5.3.2 Diverse criteria of evaluation being adopted

Analysis of data from this survey shows that 72.2% of the respondents do assign different evaluation criteria for students of different majors. Statistics shows that nearly all respondents (91.4%) try to make sure that classroom assessment can cater for the diverse needs of students.

5.3.3 Assessment becoming fairer

Data from the present study also indicates that the principle of fairness is being observed. More than 60% of the respondents claim that they can provide diverse assessment tools, and assessment tasks for

students to choose from. One thing that is favourable is that 84.4% of the respondents report they can provide more chances for students to take part in the assessment of the same content. If teachers can really conduct assessment in this way, students will definitely benefit from the assessment.

5.3.4 Assessment for and as learning on the way

The tendency of assessment development is increased attention to assessment for learning and as learning (Earl, 2013). Certainly, teachers should provide assistance in assessment as learning. Data from the questionnaire shows that 86% of the respondents could provide samples and methods to aid students' self-assessment. Further, 60% reported that they provided checklists for students to monitor their learning. If we go back to see how many respondents organize self, peer or group assessment (Table 5), we can tentatively say that assessment as learning is on the way in Chinese vocational contexts.

5.4 Innovation seen in summative assessment

Though summative assessment is still dominated by paper and pen testing (Table 6) in the form of standardized tests, new types of tasks are being employed, for example, context-based performance tasks, and real-life or vocational projects (Table 6). Apart from this, we can see other evidence of innovation in summative assessment.

Table 6

Tools for Summative Assessment

		Responses	
		N	Percent
Tools	Paper and pen testing	706	50.7%
	Context-based performance task	217	15.6%
	Real-life or vocational projects	171	12.3%
	Situational communication as in National English Skills Competition	115	8.3%
	Vocational task as in National English Skills Competition	100	7.2%
	Others	83	6.0%
	Total	1392	100%

5.4.1 Non-linguistic competences being evaluated in summative assessment

Different from former survey studies, which show that in some regions summative achievement is mainly focused on non-linguistic qualities (Lin *et al.*, 2011; Xiang & Ou, 2019), linguistic competency is treated as the center of the assessment of achievement (Table 7). This is supported by sample tests, which are composed of knowledge (grammar and vocabulary), language in use, reading, translation and writing. However, non-linguistic competencies like cultural awareness, affect, emotion, and professional ethics are also measured in summative assessment (Table 7). Support can also be found from the literature above. In many vocational schools, it is not linguistic competencies that constitute the main part of achievement assessment but the non-linguistic competencies (Lin *et al.*, 2011; Zhao, 2018).

Table 7
Summative Assessment Content

		Responses	
		N	Percent
Content	Linguistic competency	725	29.5%
	Cultural awareness	490	20.0%
	Affect and emotion	422	17.2%
	Thinking ability	520	21.2%
	Professional ethics	299	12.2%
Total		2456	100%

5.4.2 Authentic materials being used in summative assessment

Some studies reveal that there is no significant co-efficiency between students' performance in achievement tests in school and their performance in the workplace (Zhang, 2012). Getting a good mark in standardized examinations does not necessarily mean that one can handle the task at work which involves the use of English. There are reports of students who have passed the CET 4 examination [Note 2] but are unable to complete very basic communicative tasks in the workplace (Wang, 2014). To measure students' ability to use language to do things in real-life or vocational contexts, it is better to use authentic materials to design authentic tasks. This study shows that this concept is being adopted by more and more teachers. For listening, they choose broadcasts in real-life or vocational contexts (31%). For reading, 53.7% of the respondents report that they will use authentic texts in real-life or vocational contexts (Table 8). Considering the feasibility of the authentic materials, many teachers could revise the real-life or vocational dialogues to make them relevant to what to assess (66.5%).

Table 8
Materials Used in Summative Assessment


		Responses	
		N	Percent
Materials	Self-created dialogue	245	10.7%
	Revised real-life or vocational dialogue	489	21.4%
	Broadcasts in real-life or vocational contexts	228	10.0%
	Stories	371	16.2%
	Authentic text in real-life or vocational contexts	395	17.3%
	Traditional reading text	561	24.5%
Total		2289	100%

Analysis of sample tests shows that more and more authentic materials are being used in vocational English tests. Figure 5 provides an example.

Figure 5

Sample Test Questions

31.



Front Camera
250 RMB

Front Glass
620 RMB


Inner Screen
850 RMB

Home Button
200 RMB

How much should Linda pay if she wants to replace the home button and the inner screen?
A. 1470 RMB B. 1050 RMB C. 450 RMB

Authentic materials can also be found in the testing of grammar and vocabulary. For example, the following question can not only test students' vocabulary (stop, turn right, turn left), but also measure students' survival ability.

Figure 6

Sample Test Questions


The sign tells drivers not to _____ here.
A. stop
B. turn left
C. turn right

5.4.3 Performance tasks being applied

Sample analysis and questionnaire survey shows that the current summative assessment in senior secondary vocational schools in China is mainly administered in the form of paper and pen testing (Table 9). But in paper-and-pen testing of performance, tasks can also be adopted which require students to construct their responses rather than select from a given list of A, B, C and D. Performance tasks in testing may be presented as they are in real-life situations. In the example in Figure 7, students are asked to listen to a dialogue and complete an appointment memo. This is the routine task of a nurse to answer the phone.

Figure 7

Sample Test Questions

Directions:

Appointment Memo

Name of the patient	Name: Tom Sex: male
Symptoms	11: _____ 12: _____ runny noses
Experiences	13: _____ Played computer games
Doctor appointed with	14: _____
Time	15: _____
Contact	Mobile: 13591682138

In this part, you will hear a dialogue between Tom and a nurse. Tom wants to make an appointment. Listen to **Dialogue G** and complete the appointment memo for the nurse.

However, only 29.5% of the respondents claim that they will adopt context-based performance tasks in summative assessment. This implies that the majority of vocational school teachers may not apply performance assessment.

Apart from mid-term or final-term examination, projects are also adopted in vocational middle school instruction (Table 9). This shows the concept of assessment proposed in the *Syllabus* is now being practised in senior secondary vocational schools.

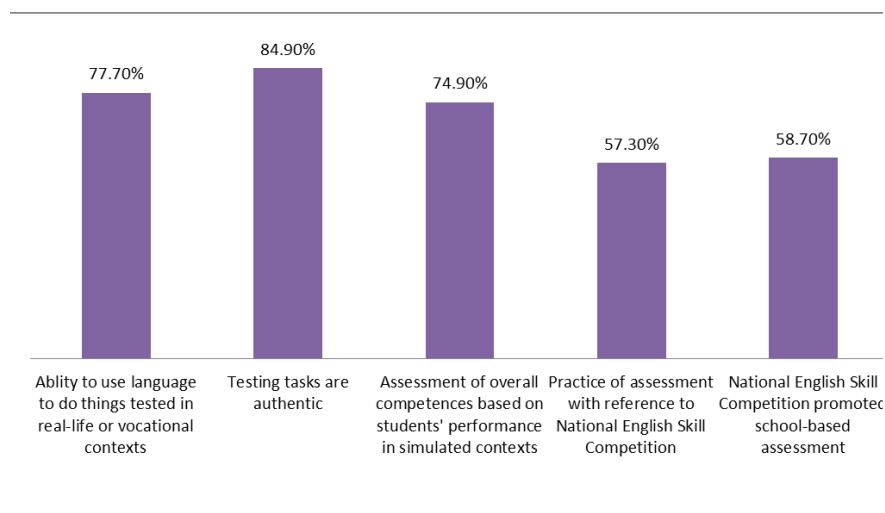
Table 9

Summative Assessment Tools

		Responses	
		N	Percent
Tools	Paper and pen testing	706	50.7%
	Context-based performance task	217	15.6%
	Real-life or vocational projects	171	12.3%
	Situation-based communication	115	8.3%
	Vocational tasks	100	7.2%
	Others	83	6.0%
Total		1392	100%

To measure students' ability to use language in every-day and vocational contexts, there is need to design real-life or vocational contexts, or simulated contexts. Data from the survey indicates that most teachers are adopting this concept in summative assessment (Figure 8).

Figure 8

Summative Assessment Practice

6 Conclusion

The present study set out to investigate how the concept of assessment that was proposed in the 2009 *Syllabus* is being practised in China. Data from the online survey, a national instructional design competition and sample tests shows that teachers have been conducting assessment with reference to the 2009 *Syllabus*. We can see a shift from assessment *of* learning to assessment *for* and *as* learning. A large variety of techniques are being applied in formative assessment, and performance tasks are being applied. Students are beginning to assume more responsibility for their own assessment. Stakeholders such as enterprises are entering school assessment. With core competences proposed in the 2020 *Standards*, there is need to consider how assessment might be adjusted in terms of the criteria to use to evaluate students' development in core competencies, including students' competence in communicating in vocational context, cross-cultural communication, thinking and learning ability. There is also a need for research concerning how the consequence validity of formative assessment may be assured. Considering the diversity of students and social requirements in different regions, there is a need for research into how to avoid bias in summative assessment. There is a further need for reform to change the fundamental ways in which vocational schools operate in assessment and evaluation.

Notes

1. Chinese senior secondary vocational school students can be roughly categorized into two types in terms of language skills: public service and science & engineering. Students who major in disciplines that involve public service, such as tourism, management, tend to have better listening and oral skills, while those who major in science & engineering, such as machine manufacturing are better at reading and writing. Future work requirements also differ in terms of language skills. Considering these two aspects, the project attempted to provide students with opportunities to choose the relevant summative assessment test.

2. CET 4 is a national English examination for college graduates. It is ranked 'Band 4' because it equates to the language proficiency students should have after completing four semesters of tertiary course study. Nearly all enterprises require tertiary graduates to have passed the CET 4 examination before entering the workplace.

References

- Ataya, R. L. (2007). Policy and technical considerations for classroom assessment. In P. Jones, J. F. Carr, & R. L. Ataya (Eds.), *A pig don't get fatter the more you weigh it: Classroom assessments that work* (pp.71-86). Teachers College Press.
- Belgarad, S., Burke, K., & Fogarty, R. (2008). *The portfolio connection: Students work linked to standards* (3rd ed.). Corwin Press.
- Black, P. (1998). *Testing: Friend or Foe? Theory and practice of assessment and testing*. Falmer.
- Borich, G. D. & Tombari, M. L. (2004). *Educational assessment for the elementary and middle school classroom* (2nd ed.). China Light Industry Press.
- Burke, K. (2010). *Balanced assessment: From formative to summative*. Solution Tree Press.
- Caffrey, E. D. (2009). Assessment in elementary and secondary education: A primer. <https://fas.org/sgp/crs/misc/R40514.pdf>
- Chen, J. (2013). Study of multiple assessment in vocational English instruction. *Modern Education*, 10, 45-46.
- Chu, C. (2017). Study of context-based evaluation instruction. *Journal of Xingyi Normal University of Nationalities*, 2, 97-103.
- Du, W. (2012). Application of formative assessment in vocational English instruction. *Journal of Lvliang Education Institute*, 29(3), 69-71.
- Earl, L. M. (2013). *Assessment as learning: Using classroom assessment to maximize student learning*. Corwin.
- ERA, APA, NCME. (1999). *Standards for educational and psychological testing*. American Psychological Association.
- Feng, P. (1995). *On evaluation*. Dongfang Press.
- Fu, S. (2012). *The influence of formative assessment on self-efficacy in vocational English class*. Tianjin Normal University.
- Feng, Y. (2015). Study of the role of formative assessment in the promotion of students self-efficacy and achievement. *Course Education Research*, 3, 15-16.
- Herman, J. L., Aschbacher, P. R., & Winters, L. (1992). *A practical guide to alternative assessment*. Association for Supervision and Curriculum Development.
- Hopkins, K. D. (1998). *Educational and psychological measurement and evaluation* (8th ed.). Allyn and Bacon.
- Jia, B. (2012). Research on diversity of evaluation agents of students' studies. *Journal of Mudanjiang College of Education*, 1, 64-65.
- Klerk, S., Veldkamp, B. P. & Eggen, T. J. H. M. (2018). A framework for designing and developing multimedia-based performance assessment in vocational education. *Education Tech Research*, 66, 147-171.
- Lane, S., & Stone, C. A. (2006). Performance assessment. In R. L. Brennan (Ed.), *Educational measurement* (pp. 387-431). Praeger.
- Gskey, T. R. (2008). The rest of the story: The power of formative assessment depends on how you use

- the results. *Educational Leadership*, 65(4), 28-35.
- Li, F. (2013). Innovation of formative assessment plus summative assessment. *Occupation*, 4, 69-70.
- Liang, J. (2012). Study of integration of formative assessment and summative assessment in senior vocational English instruction. *Health Vocational Education*, 30(17), 65-66.
- Lin, A., Liang, C & Chen, Q. (2011). Survey of vocational students learning assessment. *Vocational & Technical Education Forum*, 3, 77-80.
- Lin, H.. (2013). Study of the portfolio assessment in vocational English. *Vocational Education Newsletter*, 9, 72-73.
- Linn, R. L. & Gronlund, N. E. (2003). *Measurement and assessment in teaching (8th ed.)*. China Light Industry Press.
- Liu, L. & Qin, S. (2011). Application of portfolio assessment in autonomous learning of vocational school students. *Overseas English*, 11, 142-143.
- Liu, X. (2016). Study of formative assessment vocational English listening and speaking instruction. *Modern Education*, 10, 52-53.
- Lu, Y. (2011). Study of the integrated model of assessment in vocational English learning. *Reference for Middle School Teaching*, 9, 90-91.
- Lu, Z. & Wang, D. (2005). *Assessment and testing in middle schools: From theory to practice*. China Electric Power Publishing House.
- Ministry of Education (2009). *English teaching syllabus for senior secondary vocational education*. Higher Education Press.
- Ministry of Education (2020). *Curriculum standards for senior vocational English education*. Higher Education Press.
- O'Connor, K. (2009). *How to grade for learning, K-12 (3rd ed.)*. Corwin Press.
- Popgam, W. J. (2008). *Transformative assessment*. Association for Supervision and Curriculum Development.
- Qi, F. (2015). *A survey of English teaching assessment in secondary vocational schools in Taiyuan city*. Shanxi University.
- Ren, M. (2011). Study of developmental assessment in vocational English classroom instruction. *Jiangsu Education*, 3, 42-43.
- Sha, Y. & Xu, Y. (2018). On effective docking between vocational English skill competition and teaching reform of English education of secondary vocational education. *Vocational and Technical Education*, 39(8), 61-63.
- She, P. (2012). Application of formative assessment and summative assessment in oral English instruction. *Journal of Qingyuan Polytechnic*, 5(1), 112-114.
- Shi, X. (2018). *Practical research on formative evaluation in EFL classroom in secondary vocational schools*. Hebei Normal University of Science & Technology.
- Song, L. (2017). Study of formative assessment in senior vocational English instruction. *English Square*, 9, 158-160.
- Su, Y. (2011). *A Study on incentive effect of formative assessment in secondary vocational school's English teaching*. Hebei Normal University.
- Stiggins, R. J., Arter, J. A. Chappuis, J., & Chappuis, S. (2004). *Classroom assessment for students learning: Doing it right - using it well*. ETS Assessment Training Institute.
- Tang, L. & Meng, F. (2017). Study of portfolio assessment in vocational English instruction. *Learning Weekly*, 34, 33-34.
- Tong, J. (2018). Application of multiple evaluation in vocational English instruction. *Journal of Kaifeng Institute of Education*, 38(3), 140-141.

- U.S. Congress, Office of Technology Assessment (1992 February). *Testing in American schools: Asking the right questions*. U.S. Government Printing Office.
- Wang, D. (2007). *Authentic assessment: From theory to practice*. Foreign Language Teaching and Research Press.
- Wang D. (2010). Validity study of the college English evaluation system. *Foreign Languages in China*, 7(2), 13-20.
- Wang, D. (2011). Constructing a developmental vocational English evaluation system. *Journal of Nanning Polytechnic*, 16(1), 50-53.
- Wang, D. (2011). Construction of the assessment system for promoting English curriculum development in secondary vocational schools. *Journal of Nanning Polytechnic*, 16(1), 50-53.
- Wang, D. (2014). *Construction of context-adaptive evaluation framework*. Scholar's Press.
- Wang, D. & He, W (2012). Review of vocational English assessment models. *English Teacher*, 12, 60-65.
- Wang, D., Liang, M., Li, R., Xu, F., & Xu, Y. (2010). Study of English assessment in senior secondary vocational schools. *Chinese Vocational and Technical Education*, 35, 24-28.
- Xia, Y. (2010). *Practical research on formative assessment in secondary vocational school English teaching*. Shanghai Normal University.
- Yang, S. (2015). On technical college evaluation diversification. *The Guide of Science & Education*, 6, 18-19.
- Wu, R. (2011). *Evaluation on the learning of secondary vocational school students: Current situations and countermeasures*. Suzhou University.
- Xiang, K. & Ou, W. (2019). A survey study of students' academic evaluation in secondary vocational schools in Guangdong Province. *Journal of Guangdong Polytechnic Normal University*, 5, 30-37.
- Xu, Y. (2011). *Application of student assessment to English writing in secondary vocational school*. Hebei Normal University.
- Yang, X. (2018). Study of the influence of formative assessment on vocational students' writing ability and application strategies. *Journal of Lvliang Education Institute*, 35(3), 87-89.
- Zan, G. (2015). Analysis of integrative vocational English assessment. *Cultural and Educational Materials*, 19, 195-196.
- Zhang, J. (2012). *Investigation of social requirement for the ability to use English of non-English major graduates*. Beijing Institute of Petro-chemical Technology.
- Zhang, Y. (2018). *A study on evaluative speech acts of English classroom in secondary vocational schools*. Sichuan Normal University.
- Zhao, F. (2010). Construction a coherent vocational English evaluation system. *Science and Technology Information*, 31, 274-275.
- Zhao, N. (2018). A research on the application of portfolio assessment to secondary vocational school English teaching. [MA thesis]. Shandong Normal University.
- Zhu, X. (2017). Application of formative assessment in vocational English instruction. *English Teachers*, 17(5), 151-154.

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