Title	School-based activities and internet research assignments as modes of assessment
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Source	*ERA-AME-AMIC Joint Conference, Singapore, 4-6 September 2000*
Organised by	Educational Research Association of Singapore (ERAS)

SCHOOL-BASED ACTIVITIES AND INTERNET RESEARCH ASSIGNMENTS AS MODES OF ASSESSMENT

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Abstract: The assessment modes for a core module (PED505: The Psychology of Pupil Development and the Learning Process) at the Postgraduate Diploma of Education programme at the National Institute of Education were revised to: 1) integrate some components of the course with the School Experience component (School-based activities), 2) include elements of independent learning and online learning (Online assignments), and 3) increase the practical aspects of the learning activities and assignments (i.e., to help trainee teachers to better understand the linkages between theories and practice). Trainee teachers felt that it was a good idea to place course material on the internet, even though they are rather unsure if they would do well in courses that require the use of the internet. Trainee teachers most preferred and enjoyed the school-based activities and the online assignments, and least preferred and enjoyed the traditional written course assignment (term paper). Trainee teachers indicated that they learned the most from the school-based activities, and learned the least from the online assignments. The school-based activities, which require the trainee-teachers to integrate theoretical concepts to their classroom teaching, seem to be a good learning and assessment tool which the trainee teachers enjoyed.

Introduction
Recent Changes in Postgraduate Teacher Training Programme
Several major changes in training postgraduate trainee teachers at the National Institute of Education include:
1. Increased emphasis on the ASK (Attitudes, Skills, and Knowledge) model.
2. Increased emphasis on the use of IT in instructions.
3. Use of the Practicum-Partnership model in which experienced school teachers and principals are more closely involved in training the trainee teachers during their practicum in schools.
4. Increased emphasis on creativity and critical thinking in instruction (Chellappah, Goh & Gopinathan, 1999).

Revision of a Education Studies Module
The course schedule, structure and assessment system for the PED505 module: The Psychology of Pupil Development and the Learning Process was revised for the January 2000 semester. PED505 is a core compulsory module for all trainee teachers in the Postgraduate Diploma of Education programme.

Three objectives were focused on in the planning and implementation of the revisions:
1. To integrate some components of PED505 with the School Experience. Trainee teachers spend 7 weeks in school for their School Experience during which they are assigned to work under the supervision and mentorship of a number of senior

school teachers and one NIE supervisor (Chellappah, Goh & Gopinathan, 1999). Three school-based activities were designed as part of the assignments for PED505 in the attempt to link the thereotical concepts learned in PED505 and the real-life classroom teaching experience.

2. To include elements of independent learning and online learning into the PED505 module. Trainee teachers were required to complete two internet search assignments.

3. To increase the practical aspects of the learning activities / assignment (ie., to make PED505 less theoretical - a complaint that PED505 students often made in the past).

Schedule for PED505 Pupil Development & the Learning Process (January 2000)
The schedule for PED505 is shown in Table 1. The trainee teachers met for two class lectures before they started their 7 week school experience. The school-based activities were completed during their school experience. The trainee teachers completed the two internet search assignments after the school experience. They then met for four class lectures before completing their final course assignment.

Table 1
Course schedule

Date	PED505 Class	School experience
Jan 7.	Mass briefing by coordinator: Overview of PED505.	
Jan 7	Meet the PED505 Lecturers session.	
January 10-15		Week #1
January 17-22	First class lecture (2 hours): Overview of topics. Explanation of school-based activities	Week #2
January 24-29	Conducts school-based activities #1-3 All school-based activities due: April 4.	Week #3
January 31-Feb 5		Week #4
Feb 7-12		Week #5
Feb 14-19		Week #6
Feb 21-26		Week #7 (last)
Feb 27-March 5 Sunday-Sunday	*Programme Orientation / NIE recess*	
March 6-11	Read on-line materials & submit assignments via email to course lecturers. • Due: March 18 • Due: March 31	
March 13-18		
March 20-25		
March 27-31		
April 4	Class lecture.	
April 11	Class lecture.	
April 18	Class lecture.	
April 25	Class lecture.	
May 12	Submit course assignment to lecturers.	

Course Assessments
1. School-based activities aims:
   a. To understand the school teachers' perceptions of the needs and charateristics of the primary school pupils. Maslow's (1970) theory of motivation was used as the framework for this assignment.
   b. To understand the perceptions of the morals and values of the primary school pupils, and how moral education is delivered in schools. Gilligan's (1982) and Kohlberg's (1984) theories of moral development were the framework for this assignment.
   c. To understand the school teachers' perceptions of the influence of family on the primary school pupils, and how to work effectively with parents.

   The School-based activities attempted to get the trainee teachers to understand the implications of theoretical concepts in a school environment. The trainee teachers also searched the internet for relevant material for the school-based activities.

2. Online assignments:
   a. Learning and caring in the school and the community. Trainee teachers search for print and non-print (e.g., videos) material regarding "learning and caring" programmes and resources available for schools and the community.
   b. To identify and solve the learning problems stated in a hypothetical scenario.

3. Case study:
   To identify the problems and suggest strategies to help a hypothetical pupil. Five topics were covered in the scenario: a) attribution and motivation (self-concept), b) experience in the school, c) remembering and transferring knowledge, d) mutiple intelligence and metacognitive skills, and critical and creative thinking.

The marks given to each assignment is shown in Table 2.

Table 2
Marks for Each Assignment

#	Assignment	Topic	Marks
1	School-based activity	Needs and characteristics of Singaporean children	10%
2	School-based activity	Morals & values of Singaporean children	10%
3	School-based activity	Influence of the family	10%
4	On-line assignment	School and community	5%
5	On-line assignment	Helping students remember and transfer learning	5%
6	Course assignment	Case study	60%
	Total		100%

Purpose of Study

This study is to examine the trainee teachers' attitudes and preferences for the assessment used in PED505.

Method

Participants

Two hundred and eight (208) of the 216 trainee teachers completed the questionnaires. The return rate was 96.29%. The mean age was 26.25 (sd=4.36).

Range of age were 21 to 46. There were 30 men and 163 women. Fifteen participants did not indicate their gender on the questionnaire.

Materials & Procedure
The PED505 students were asked to complete a 20 item questionnaire on April 25, 2000 during the final PED505 class.

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Results
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Ownership of Personal Computers
97.6% of the trainee teachers (n=203) owned a personal computer at home. 192 of the 203 personal computers (94.5%) were connected to the internet. Only 1.9% (n=4) did not own a personal computer at home. One student did not answer this question. In comparion, the ownership rate of personal computers among the general population in Singapore was 47.4% in 1998. There has been a steady increase in the ownership rate of personal computers from 11.2% in 1988 to 20.2% in 1992 (Singapore Department of Statistics, 2000).

Time Spent on Course
Trainee teachers spent an average of 2.54 hours (sd=1.67) per week in study activities for PED505. Trainee teachers spent an average of 1.51 hours (sd=1.23) per week discussing or working with their classmates for PED505.

Perceptions of Control over Course
Trainee teachers felt that they had to do a lot of independent learning to obtain an "A" grade for PED505 (mean=5.25, sd=.93) with "1" being "very little" and "6" being "very much". Trainee teachers felt that they had on average a 60.64% chance of obtaining the grades that they expected or wanted. The mean perception of control over their PED505 grades was 3.24 (sd=1.07) while their mean perceived amount of control over their PED505 was 4 (sd=1) (with "1" being "very little control" and "6" being "very much control").

Number of Assignments
Trainee teachers had to complete a total of six assignments for the course. Trainee teachers felt that there should be about two to three assignments for PED505 (mean=2.36, sd=1.13). The range was from 0 to 8 assignments. However, trainee teachers indicated that they felt that they had a better or equal chance of obtaining a better grade in PED505 which required them to complete six assignments, compared to when it only has one assignment (see Table 3).

Table 3
Probability of Obtaining a Better Grade

Probablity of obtaining a better grade	Percentage
More likely	18.6%
Likely	30.4%
Equally likely	30.4%
Less likely	16.2%
Very much less likely	4.4%

Attitudes towards the Use of the Internet in the PED505 Course
While the trainee teachers tended to agree (mean=4.58, sd=1.33) that it was a good idea to place the PED505 course material on the internet, they were less confident (mean=3.43, sd=1.2) that they would do well in courses that required the use of the internet ("1" being disagree and "6" being agree).

Use of Email
The trainee teachers were required to email 2 short reports (300 words) for the on-line assignments. About 83% of them liked the use of email to submit their assignments (See Table 3).

Table 3
Use of Email to Submit Assignments

Response	Percentage
Dislike very much	1%
Dislike	15.9%
Like	62%
Like very much	20.7%

Attitude towards IT and Computers in School
About 70% of the trainee teachers liked the use of IT and computers in schools (see Table 4). However, a significant minority of them (27.4%) disliked the use of IT and computers in school.

Table 4
Attitude towards IT and Computers in School

Response	Percentage
Dislike very much	5.8%
Dislike	21.6%
Like	61.5%
Like very much	10.6%

Linkages between Theoretical Concepts and Practice and Implementation
Trainee teachers were somewhat able to understand the linkages between theoretical concepts and practice and implementation (mean=3.93, sd=.97) with "1" being "disagree" and "6" being "agree". It was predicted that the school-based activities helped the trainee teachers to understand both the theoretical concepts of teaching and how these concepts can be implemented in classroom situations.

Preference for Assignments
Trainee teachers most preferred the school-based activities and the online assignments, and least preferred the course assignment (see Figure 1). Trainee teachers indicated that they learned the most from the school-based activities, and learned the least from the online assignments (see Figure 2)
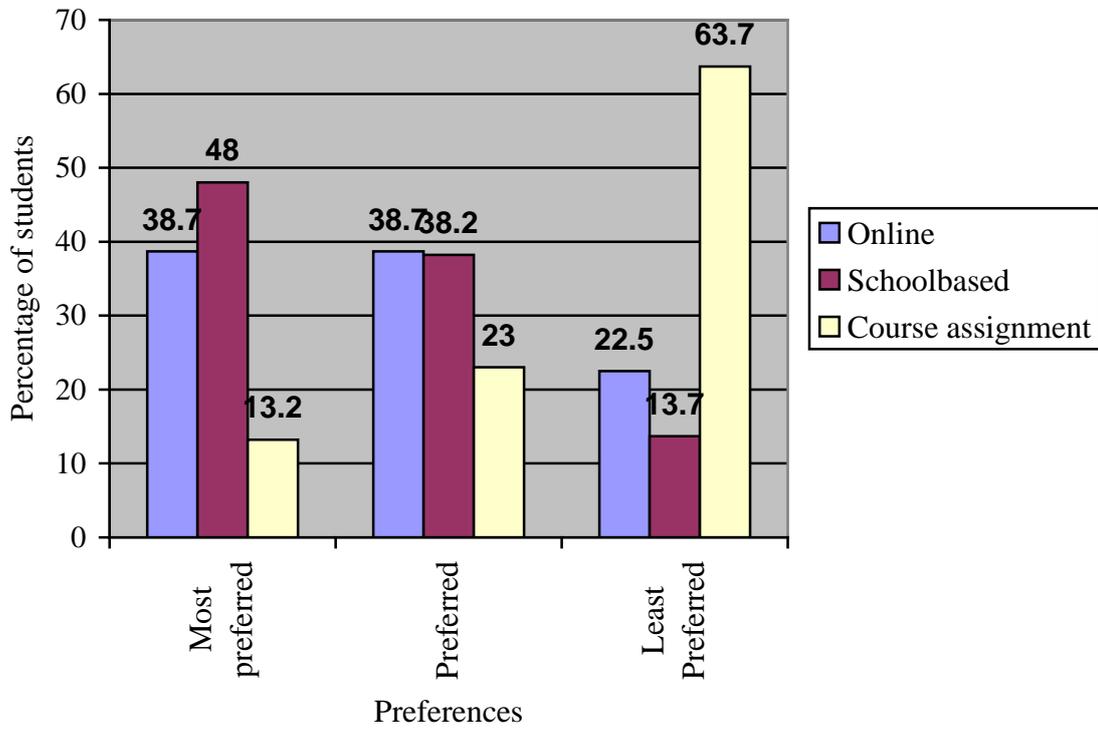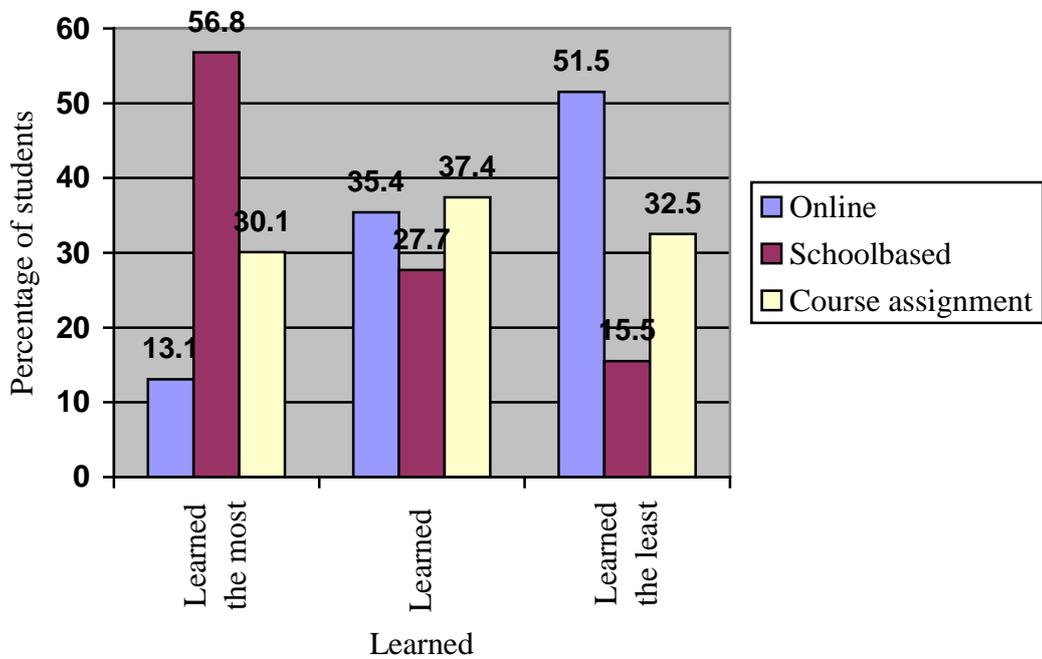
Figure 1: Preference for assignments

Figure 2: How much students learned from assignments

Enjoyment From Completing Assignments

Trainee teachers most enjoyed completing the online assignments (even though they did not learn very much from the online assignments), and the school-based activties. They least enjoyed completing the course assignment, even though they indicated that they learned quite a lot from it (see Figure 3).

Figure 3: How much students enjoyed completing the assignments
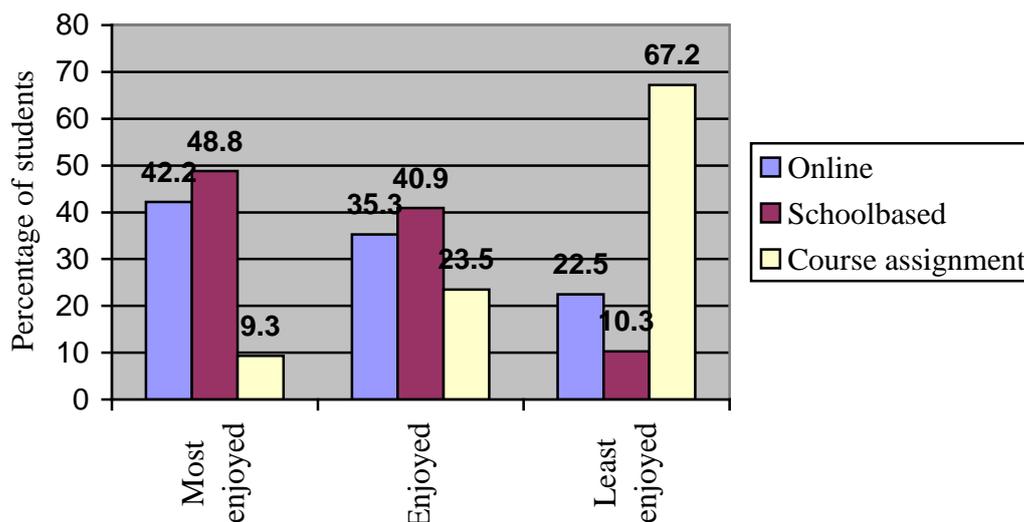
Trainee Teachers' Suggestions for Improving the PED505 Course

The most common suggestion was to reduce the number of assignments for PED505, and to increase the weightage given for the school-based activities (see Table 5).

Table 5

Trainee teachers' suggestions for improving the PED505 course

#	Suggestion	Number of students making similar suggestions
1.	Reduce number of assignments	19
2.	Increase weightage for school-based activities	16
3.	Too much independent reading	10
4.	Increase number of lectures	10
5.	Too little time to complete course	9
6.	Less internet searches	9
7.	Duedate of assignments too close to those of other modules	5
8.	Increase school-based activities	4
9.	Provide a pack of reading material	4
10.	Duedate of assignments too close to each other	3
11.	More indepth discussions of material	2
12.	Give assignments that require more depth in research	1
13.	Assignments are vague	1
14.	More group work for assignments	1
15.	More time to complete assignments	1
16.	More guidance for students with no psychology background	1

Discussion

The overall reaction of the trainee teachers' to the school-based activities was positive. The school-based activities were completed during the 7 week school experience. The school-based activities involved: 1) surveying the needs and characteristics of their pupils in school, 2) conducting a short survey of their pupils to examine the pupils' perceptions of morals and values, and 3) discussing with the school co-operating teachers about ways to work effectively with parents. These activities attempted to link the theoretical concepts learned in class to the real life school environment. Trainee teachers most preferred and enjoyed the school-based activities and the online assignments, and least preferred and enjoyed the traditional written course assignment (term paper). Trainee teachers indicated that they learned the most from the school-based activities, and learned the least from the online assignments. This is rather strange, given that the trainee teachers indicated that they enjoyed the online assignments. A possible reason for the low learning ratings for the online assignments is the perceived lack of guidance from the course lecturers. The trainee teachers also indicated that they liked the use of emails to submit their course assignments. Wong and Hsui (1999) suggested that e-mail is an effective tool to enhance teaching. The school-based activities, which required the trainee-teachers to integrate theoretical concepts to their classroom teaching, seemed to be a good learning and assessment tool.

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