

420 Assignment 2 5 entries (selected from your weekly in-class or at home learning tasks) at approx 500 words per entry

Due by Friday May 21st

Best so far 7, 5, 1, 6 no – 2 (education websites), 3 (1300 words), 4 (Immunization), 11 (learning styles)

Task [1](#), [5](#), [6](#), [7](#), [8](#),

Task 1 496 words not including question and *New Jersey Schools Brace for Governor's Next Round of Cuts*

From current newspapers – two articles about child and adolescent development or learning. How are these issues influencing policy development and child provision of services to children?

The issues currently affecting education in the States is the financial difficulties of the past year. In New Jersey more than one billion dollars will be taken out of the education sector. This appears to be political motivated at the costs to the children. The teacher's union had opposed the election of the current governor, Mr Christie. His first cut is in education after the election.

Private schools, where costs per child from kindergarten to year 12 is in the upper \$30,000 with most schools charging around \$38,000 per year per student, is not affected by budget cuts. Most private schools have large waiting lists. Parents contribute also to the schools, for example Kate Winslet's two children go to the school I am doing my prac teaching at along with many other celebrities and wealthy people. Before Kate's recent break up her Oscar director husband, Sam Mendes, worked with a film project with the eighth grade. This is the divide in education in the USA. The wealthy send their children to private schools which have all the latest of everything. For example, two years ago I worked at a private school and we had all new Mac computers with all the latest media suites and as a computer teacher I could do a lot of advanced projects with all grades. We had smart boards in all the classrooms and there was no limit to what I could have for my classes. Before that I was the director of technology at a private school for a few years and again all our needs were easily met. At that school every female student was given an Apple Mac laptop from grades five onwards so that they could have a good foundation in computing. Last year I taught at a public school with fifty donated laptops at the beginning of the year and by mid year half had been stolen by students. We had two projectors for the school and they were often in need of repair. The printers rarely worked and there was little money for anything. We were one of the better equipped schools. We even had a free breakfast and lunch program because the children rarely had much at home to eat.

Children's development is affected by these differences in resources available to students. Students without computers at home are disadvantaged. More than fifty-percent of students at my public school did not have access to a computer at home, whereas in private schools students bring their latest laptops with them and have Internet on their phones. This continues from schools to home. I live in an area where my wife and I are the rare acceptance, we are white and have income and we own our home. The children play in the street in front of our house and on the way home from the local public school a block away I often see them fighting and doing drugs in the alley across from my house.

New Jersey Schools Brace for Governor's Next Round of Cuts

By WINNIE HU Published: March 14, 2010

The New York Times Education Section

“The new cuts mean laying off thousands of teachers, and eliminating a host of extras like after-school and early-childhood education programs that parents have come to count on. Even before the budget cuts, Mr. Christie, the first Republican to lead the state in eight years, had come under fire from some educators and parents for seeking to limit teacher benefits and pensions, and for referring in a debate to preschool — a priority of the administration of the previous governor, Jon S. Corzine — as “baby-sitting.”

Task 5 546 words - cut back 50 words if possible

Explain how Piaget's and Vygotsky's theories of development complement each other. What classroom practices that you see or use are inspired by these theories? Indicate the age/grade of children in your response.

Piaget and Vygotsky have theories which complement each other and can easily be used together in the classroom. Both focus on cognitive (intellectual) development and both involve the concept of actively constructing knowledge.

Piagetian educational applications focus on the individual acting as a scientist or philosopher exploring the world and building up “theories” about it or in Piagetian terms, 'cognitively constructing knowledge' and Vygotskyian focuses on social interactions where a “more knowledgeable other” provides temporary support, “scaffolding” until an individual can perform a task on his or her own socially constructing or “co-constructing” knowledge. (Berk, 2009, Chandler, 2001, Flannagan, 1999).

In a project we are doing on the first colonies of the United States, students explore on their own, through books, teacher's information, videos, and the Internet as a Piagetian scientist; not only assembling facts about the colonies but also developing theories about why a particular colony they have been assigned was successful. Students are put into groups of three during which time they assemble the information they have gathered on their own about their colony and then they create a poster and a short presentation which they will give in front of the class. The Vygotsky scaffolding is removed once they have accomplished the goal of readiness of a presentation. The educational applications of Piaget's and Vygotsky's theories require active engagement with the material to be learned and emphasizes students working in groups to not only construct knowledge but to share it with others.

In 4th grade music class the teacher may give students different untuned percussion instruments and ask them to tell a story in small groups, using only the sounds of their instruments...in this they might discover which combination of sounds might make a 'scary' sound, or which combination might sound like rain, or might sound like someone very unhappy. Vygotsky and Piaget believe in discovery of learning and acceptance of individual differences and bringing these difference together in small groups gives new creative synthesis that can be brought in front of the larger group. Before they get to this 'stage' the students would have learned enough about sounds made from their instruments to produce a representational mood. As Piaget and Vygotsky realised, knowledge is constructed within a specific material and social context and in a music class this is actualized.

Vygotsky favored non-teacher centred classrooms where students and teachers were active together in the learning process. We are doing a collaborative activity that will have both students and teachers engaged.

Our project 'live from the fourth grade' will be a newsroom event that not only will place students as the creative force with news stories from across the school but will bring in teachers and we will use CNN as a model format.

At St. Luke's School Piaget's and Vygotsky's help form our fourth grade classes milieu. Piaget's ability to reason logically in ten year olds complements Vygotsky's belief in children's ability to use society's tools as is shown in music, classroom presentation and our collaborate project provides a settled interactive learning environment. The source of motivation also compliments one another; Piaget believed that children intrinsically are motivated to interact with the environment whilst Vygotsky believed that motivation from adults to pass on knowledge enhances the learning experience.

Bibliography

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Task 6 Information-Processing Perspectives 496 words

READ Berk , Chapter 7.

Why is a young child's capacity to process information more limited than that of older children and adults?

A young child does not have the physical capacity, psychological workings, or mental capability to operate in the same manner as an older child. Through maturation these parts of the human synthesize to create one who is ready to process information more effectively.

Firstly, the brain is not developed. The store model suggests that two broad aspects of the cognitive system increase with age (p. 277); the basic capacity of the brain expands as a child grows and the child begins to use strategies to use the mind more effectively. As a child grows older there are gains in the working-memory capacity and in the processing speed which enhances a children's ability to learn. Similarly, connectionists claim that the human cognitive system is a general processing device that attains competences as relevant learning opportunities arise. (P. 280). At birth the brain is a quarter of the adult size brain and by the end of the first year it is half of its postnatal growth and by age 3 it is 80% of its adult size¹. According to Case this growth rate imposes a ceiling on cognitive development when a child cannot exceed the processing speed until the brain is larger in later childhood. (P. 281)

Information processing efficiency increases as children age. A younger child gains experience through knowledge, developing memory strategies and modeling. It is not until about the age of three that a child realizes that thinking takes place inside their head (P301). As a child ages they are able to sustain their attention span and their inhibition.

Strategy choices, such as Siegler's, 'model of strategy choice' when performance tends to progress

from a single incorrect approach to a more complex state, along with the development of language and literacy give growth and a knowledge base that makes processing information more evolved as children grow older. Kuhn found (P. 311) that with age children increased their capacity to reason.

To process information involves not only the physical and the ability to process information and to develop communication but it also is based on stimulus such as rewards and feelings. As a child experiments, learns to listen, observe, communicate and interacts with others he or she evolves. Various theorists have catalogued stages and given meaning to the interpretation of their findings, but there is no unified 'this is it' theory, as there are many factors involved such as environment, society, the times we live in (are there cuts to education such as in the USA in 2010, high unemployment or other social factors impacting the learning area?), beliefs (some do not believe in evolution, and some have their own value and belief systems which may be in opposition to everything discussed in our text) there is only the common knowing that cognitive development is a learning process for both children and researchers. Decades from now we may have brain implants that will make all these learning patterns something that once was.

Task 7 519 words now not including the question
Design a lesson/learning activity (or series of learning activities) that emphasises different intelligences (as proposed by Gardner, pp. 323-324)

Technology can be used to facilitate learning in each intelligence area. In a year I try to cover all these areas. Students may be more engaged in some areas than others so I try to create projects that overlap. For example, now in 4th grade we are doing a collaborative project of a newscast, 'live from the 4th grade' that will use all the applications in some way listed below.

1. Linguistic

Students who learn best through language express themselves through computer programs where they can create with words. From my experience, K-12, this has been everyone. In lower grades I use 'Comic Life' for students to storyboard. In Middle School I have used multimedia tools such as 'Photoshop', 'Garageband', and video editing such as 'movie maker' on a PC or iMovie if on a Mac to create a youtube video that has sounds, rhythms and meaning of words and the functions of language incorporated. In upperschool we have created games, 3D animation and virtual worlds all having the many linguistic parts in the linguistic part of Gardner's multiple intelligences.

As all students need to write a script for a story they will writing rough notes on paper then using their computer to type up and edit what they will say. I have grouped 20 students in pairs so that there will be ten stories. Within each paring there will be individual tasks such as getting the raw material such as film footage or photographs. The intelligences below will use technology to enhance their projects.

2. Logical/Mathematical

This group excels with creating spreadsheets, databases, and charts. For our news show one student in each pair will videotape: experimenting, demonstrating, data gathering a story whilst the other may be the one with the microphone or clipboard. I will select the most logical (from my observation and from the teacher's input) students to create the order that the news story will be in. This will be done on a computer based spreadsheet.

3. Musically, the students are working with their music teacher to create the opening news sounds, and students who are 'better' at creating rhythms are leading the class for this sound and putting their sounds

for editing into Garageband.

4. Spatial students will be selected to combine visual elements such as editing photographs and where to place video clips in the newscast for each story.

5. Bodily-kinesthetic intelligence people are the hands-on students. They are the ones who will set up the newsroom environment, setting up the 'anchor desk' with the Smartboard and placing the newsreaders an.

6. Interpersonal students will be the anchors of the show. All students will be using a word processing application to write their stories. However the most interpersonal defined students will be the face of 'live from the fourth grade'.

7. Intrapersonal students are good at working independently toward a group goal Computer-based journaling (blogging as journalism) Internet research and collating stories as we already have too many stories some will need to be cut – which to 4th graders, having their story cut, will need students with interpersonal skills to pull it off.

Task 8 500 words my own -

What are the advantages and disadvantages of bilingualism according to the research (p. 393 - 395)

Researches agree that children learning more than one language at an early age are advanced in cognitive development (Mechelli et al., 2004). They out perform others on tests of selective attention, analytical reason, concept formation and cognitive flexibility (Bialystok, 2001; Bialystok & Martin, 2004).

From my own personal experience, the way a second language is taught and the reason for it creates success or failure with the program. In a school I recently taught at the director of the school believed children should learn Chinese. This started with grade one and three Chinese teachers in a row quit in the first semester. The fourth teacher had taught in China for three years at an International school and knew about Chinese culture but she had limited working use of the language. The fact that she was an African-American who had grown up in Harlem with no Chinese background made the classroom situation more difficult. The children made fun of her as they had with the previous teachers who actually knew Chinese, but not English very well. In middle School, 6 - 8th grade, the situation was even worse. There was a teacher from Taiwan, also with limited English usage, and the children were very unruly and I did not observe much learning at all (I was the computer integrator so I saw classes K – 8) in action. The whole school was poorly run with chaos at every level, to the point that the police were often called in. The student body was 98% African American with no interest in learning Chinese. It would have been better to have had Spanish classes. There are more Spanish speakers in the U.S. than there are speakers of Chinese, French, Hawaiian, and the Native American languages combined (From Wikipedia, May 5, 2010). Roughly half of all U.S. Spanish speakers also speak English "very well", based on the self-assessment Census question respondents "(2000 Census, Language in the US" (PDF). <http://www.census.gov/prod/2003pubs/c2kbr-29.pdf>. Retrieved May 5, 2010). According to research from Berk and others, people in the US should be better at reasoning and cognitive flexibility than we are (my observation). One then wonders is it the languages one learns that makes a difference? Would someone speaking English and French or Dutch (my wife would agree) and English be a better social being? An interesting research project (another PhD?) would be to find out which languages are best for cognitive production. Using brain scanning and cognition tests would we find that learning

Gujarati (According to Wikipedia, the 26th most spoken native language in the world) and Telugu (15th most spoken) would be the languages that create socially evolved humans who can create a better world?

Bilingual education does work as research has shown. In the two schools I am doing my prac teachings in it works. One school has classes in French (grades 5 – 12) and the other school has classes in Spanish (K – 8). However, as I discussed above, having a second language that has no understandable purpose such as Chinese in a New York City public school with almost 100% African-American students is probably not the best second language.

Other studies supporting increased academic achievement show the advantage of learning more than one language in childhood, such as:

- Third-grade students were randomly assigned to receive 30-minute Spanish lessons three times a week for one semester. These lessons focused on oral-aural skills and were conducted entirely in Spanish. **Students in the Spanish classes scored significantly higher than the group that did not receive Spanish instruction in math and language on the Metropolitan Achievement Test.** There was no significant difference in reading scores. Armstrong, P. W., & Rogers, J. D. (1997)
- Assessed a Canadian French immersion program in which English-speaking pupils attending English schools are taught partially or completely in French. The program involved nearly 33% of the children who entered the public school system in kindergarten. Two groups were matched according to socioeconomic status characteristics and were generally from a middle to upper-middle-class background. Students were administered several measures including the Canadian Cognitive Abilities Test and Canadian Tests of Basic Skills. Only Grade 5 students were given the Metropolitan Science Test only. French immersion pupils were given a set of achievement tests in French and tests of reading comprehension in French. **Results indicate that immersion group students were in general on the same level with or ahead of the regular English in most academic areas considered (e.g., work-study skills and mathematics) and were performing satisfactorily in French**
- This study examines the academic achievement scores of English learners in a two-way immersion () program and a Structured English Immersion program in two elementary schools. In addition, this study compares the English and Spanish academic performance of English learners with the achievement levels of English-dominant students in the same program. A total of 194 students were followed over a three-year period beginning with the 1999-2000 school year and ending in 2001-2002. Assessment scores from the Stanford 9 (reading and mathematics) and the Spanish Assessment for Basic Education (SABE) (reading and mathematics) were collected and analyzed. **The findings support work by other researchers who have reported that teaching English learners in their home language does not impede the acquisition of English. Similarly, English-dominant students in a program, by the end of their first and third year of this study, were achieving at-or-above grade level in both English and Spanish.**

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i **Head circumference:** Head circumference reflects brain size and is routinely measured up to 2 yr. At birth, the brain is 25% of adult size, and head circumference averages 35 cm. Head circumference increases an average 1 cm/mo during the 1st yr; growth is more rapid in the 1st 8 mo, and by 12 mo, the brain has completed half its postnatal growth and is 75% of adult size. Head circumference increases 3.5 cm over the next 2 yr; the brain is 80% of adult size by age 3 yr and 90% by age 7 yr. The Merck Manuals Online Medical Library. 1 May 2010