Coursepack

Educational Psychology

Initial class

Syllabus overview

Name card

First assignment: email to Dr. Ratcliff with

- name,
- telephone numbers (dorm, home, cell, work, etc.),
- alternate email address/es,
- something important about you,
- plans for future,
- expectations of class

You may share prayer requests via email or briefly mention them in class

Devotional

Overview of text

The 14 Learner-Centered Psychological Principles (APA Board of Educational Affairs, 1997)—located at http://www.apa.org/ed/lcp.html

Dedication of students, teacher, and classroom

Chapter One: Applying Psychology to Teaching

Devotional

Defining educational psychology

--text page two

History

*Educational Psychology began with just surveying psychology and applying the ideas to education.

*It is now a separate discipline- research of the actual classroom, schools, and kids (and adults).

How Educational Psychology Can Help:

Teaching is one of the most complex tasks a person can do

- * speak effectively
- * allow practice
- * media: visual aids, computer
- * keep interested- variety
- * monitor interest- read body cues
- * evaluate students- and yourself
- * continually improve and learn
- * relate it to your faith and needed values of students

Educational Psychology gives principles to follow; it is not a cookbook.

Research can inform practice

- how do kids think
- what are they capable of
- what works in instruction
- new ideas- that work
- self-evaluate (how to do it?)

Trained teachers are more effective. Research in text: coursework in educational psychology is associated with greater effectiveness.

Ed. Psych. grade predicted success in teaching better than one's GPA or even National Teacher Exam scores.

"Can't you just teach and see what works best for you?"

~ Yes, but there are problems with this approach.

May go with first impressions- just the first explanation that comes to mind. But you can explain things multiple ways- explanation may fit but be wrong.

- M. Scott Peck: Most behavior is "over-determined"—multiple influences
- *Limited cases- see something work 2 or 3 times for you- but may never work again.
- *Or try to copy someone who is a great teacher, but it fails for you (different personality).
- *Ignore contrary evidence (we are self-deceptive- carnal nature)
 - Who is going to heaven?
- *Unrecognized variable (other causes than what we see)
 --example: Christians and few automobile accidents?

Scientific approach/ Research can help us overcome the limitations of unsystematic observation and hunches because research involves:

- * Sampling- representation of what happens <u>in general</u>, not just one person's experience or how one student (or one class) responds.
- * *Control* you can see what causes what (at least conceptually controlling one aspect or look at others)
- * *Objectivity* try to take an outsider's view (some say this is impossible- true, can't be perfectly objective. But we know someone who is perfectly objective- He is outside the human condition, yet He has become one of us. Christians can affirm that there is an objective view and we can move towards it- especially if we know the One who is perfectly objective. (Proverbs 1:7)
- * *Publication* so results of a study are credible (double-checked by scholars-"peer review") (Proverbs 11: 14)

* *Replication*- repeatable (if you doubt the results, try repeating the research yourself.)

Research can give dependable results **if** done correctly and applied validly. But researchers need to be humble and we need to be cautious of trusting results too quickly. Research has limits. (Proverbs 3:7)

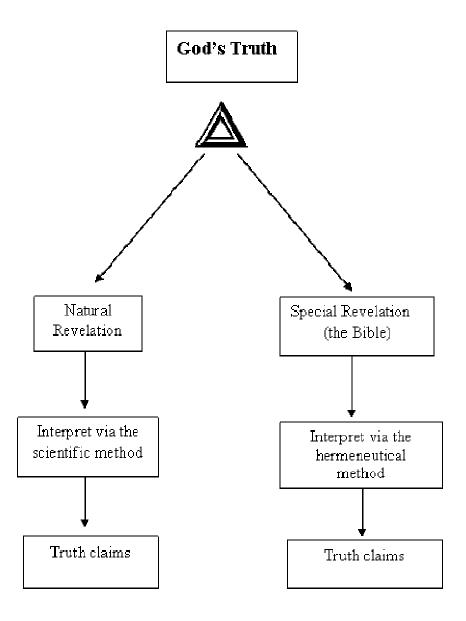
Example: Is it good to hold back a child that is doing poorly?

- --text says staying another year in some grade is associated with dropping out early
- --if "socially promoted" and given remedial help, one is more likely to stay in school and finish
- --always true? Virginia Johnson says . . .

What do you think?

Other research indicates:

Need to realize the limitations of research- so you also need to test research conclusions by Scripture.



Thus research can provide guidance for the classroom, church, and other contexts

Thus scripture gives direction for life, faith, values, meaning for life, and guidance for the classroom, church, and other contexts

Can be:

- similar truth claims
- complimentary truth claims
- contradictory truth claims
- independent truth claims
- value differences- here the Bible has only an adequate base (science can't make value claims)

If contradictory (rare when completely contradictory) problem is in the interpretation-poor research or poor theology/ hermeneutics

Teaching as Art

Art: like music or painting, no set formulas

- * Communicate with wide range of emotions
 - EXCITEMENT- to get interest
 - ANGER- may spur action (but your anger may produce less respect, unless angry at evil- not at students)
 - SORROW & TEARS
 - example: my son
 - ~ Recall teachers that moved you emotionally.
- * Acting on values- you see teaching as very important, influencing people for the rest of their lives; you put your heart into it- communicate deeply held values (even if no overt witness is allowed in a public school, underlying values can come through). "What's different about you?"
- ~ Recall teachers that influenced you because of their values.
- * Flexibility
 - choices in methods and information to include (present vs. discover)
 - can improvise if needed
 - work around obstacles- interruptions, lack of materials
 - creativity- teacher who built a city in a classroom!

Yet teaching is also a science

- to avoid just following fads (behavioral learning, humanistic approach, objectives)
- see what systematically works and what doesn't
- need to know material before you can teach well (content, not just "go do it!")
- objectives, feedback, and homework all tested and found helpful, even pausing every 20 minutes and having someone summarize the 20 minutes helps retention and attention!

But if teacher goes with all art or all science, it becomes lop-sided teaching

ART- style without substance

SCIENCE- no heart, mechanistic

~ need a balance of these

Reflective Teaching

- a goal of this class
- reflect on textbook
- reflect on your teaching
- reflect on God's Word to your teaching (open to Him)

Consider doing a reflection booklet- if you continue it through college and into teaching, you'll become more likely to recall and apply what is learned—see last chapter of text.

Reflective teaching includes 3 attitudes:

- * Introspection- reflect on own thinking and activities
- * Open-minded- willing to question what others may just accept, willing to learn new things (a Christian should be willing to learn)
- * Take responsibility for what you do (admit mistakes, be open before God and ask for His conviction and direction)

Reflective teaching requires 3 abilities:

- * can see situation from another perspective (students' views, parents' views)
- * will look for better ways of teaching (life-long quest)
- * wants strong evidence for decisions- not just what the latest fad says

FOUR-STEP MODEL OF LEARNING AND INSTRUCTION

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- 1. Take into account what students are like and how much they know.
- 2. Specify what is to be learned.
- 3. Provide instruction by taking advantage of what has been discovered about learning, cognitive strategies, and motivation.
- 4. Determine if students have learned.

Chapter Two: Stage Theories of Development

<u>I. Erik Erikson</u>- earlier stages need positive resolution before they can resolve later stages (problems at stages 1, 2, & 3 carry over into school).

1. Trust vs. Mistrust

- trust makes faith in God possible (Erikson said this)

Can a daycare center/ preschool accomplish this?

2. Autonomy vs. Shame/Doubt

- shame is a reaction to others (external) (some shame is good)

3. **Initiative vs. Guilt** (can last through elementary years)

- conscience development- need to feel guilt when break rules (no guilt = psychopathology)

What provides healthy sense of guilt for genuine wrongdoing?

- Anticipation of pain for doing wrong (won't anticipate it if never receive it)
- Ron Taffel suggests:
 - 1. Arouse sense of responsibility (can't blame others)
 - 2. Have those who were hurt talk about pain (adult describes pain too)
 - 3. Show you won't accept misbehavior (consequences)
 - 4. Must say "I'm sorry" and tell why
- * Stories about wrongdoing and resulting guilt helps build morality
- William Bennett's work
 (Bible stories do this-enact, not just tell and listen)

4. Industry vs. Inferiority

- Praise accomplishment [what praise do you remember in school?]
 - * Art in halls: K-3rd, many things posted, 4-6 almost nothing
 - * Judicious praise (not embarrassing) for genuine accomplishment-if you praise everything it will devalue praise (doesn't mean anything)

[groups- brainstorm what you can do to encourage industry and discourage feelings of inferiority]

5. **Identity vs. Role Confusion** [student note]

(college student had no idea what to do with life)

- Erikson wrote whole book on this during the 60's- tried to make sense of the Baby Boomers (influence of time period)

Okay to delay identity? Brings some real problems

• no clear status was given to teens (not child and not adult), so teens make identity, often counter to society (argot, clothes, music, fads, cliques, etc). Not very productive for society (drugs, sex).

Result of adolescence being created in late 1800's, established widely in 1920's, less prominent during Depression and WW II, then was in full swing in the 1950's and 1960's.

What created adolescence? Compulsory education, marriage laws, and job labor laws.

Why? Need for extended education in industrialized world (??), but also to decrease unemployment among older adults

Key Areas of Identity

- 1. <u>Religion</u> (accept parents' faith, reject parents' faith, discover own faith)
- 2. Occupation (job and anticipated career/s)
- 3. <u>Gender</u> (traditional or non-traditional roles, married or single, sexuality: active or wait until married, straight or not)
- 4. <u>Politics</u> (more left or right or center, active or inactive politically)

For each or these- and other areas- you can be in one of four statuses

Achieved

- Diffused
- Moratorium
- Foreclosed

College freshmen at Christian schools were studied -less than 1% have identity achieved (religion, occupation, gender, politics.

How about you?

Christian View of Identity

We do have identity in occupation, faith, and other areas.

But fundamental identity-

"For me to live is Christ, and to die is gain." Phil. 1:21 "A new creature" 2 Cor. 5:17
An ambassador for Christ – 2 Cor. 5:20

Old identity was influenced by	first birth. Parent	s are, age is
, birth order is	, gender is	, ethnicity is
•		

New identity is influenced by second birth

- Parent is God (we are sons and daughters of <u>THE</u> King)
- Age is what God determined and will use. (irrelevant)
- Birth order is last (he who would be first must be last; the greatest is servant of all)

Identity in Christ requires <u>unconditional</u> commitment- surrender the old identity, and become a child of God and a servant to others.

II. Jean Piaget

Quite a genius (first scholarly paper at 11, asked to be collator of major museum during teen years, Ph.D. at 21)

Ph.D. was in biology, specialist in mollusks

- so very influenced by biological theory

Observed his kids and discovered behavior that fit some basic biological principles; "genetic epistemology."

Basic principles

- Kids try to organize their thoughts and actions
- Adapt to environment (change thoughts to fit the real world and views of others)
- Equilibration- self-regulating in mental abilities. Bring thinking into line with experience, so they have a coherent view of the world.

2 Basic processes in learning

- Assimilation- thoughts essentially not changed by experience. New experience is seen as a new example of a concept.
- Accommodation- thinking changes. Schema (mental representation) revised because of incongruent experience.

Tasks: assimilate and accommodate

Assimilation and accommodation are lifelong processes.

PIAGET'S STAGES

- Sensorimotor
- Preoperations
- Concrete Operations
- Formal Operations

What differences do you think these make in relation to children's spirituality? How is their faith and living for Christ affected at each stage?

Aspects of stages now disputed, but other parts of theory hold true [Piaget underestimated preschoolers and overestimated teenagers]

Piaget's stages are <u>descriptive</u>, not <u>prescriptive</u>- they describe how children in general think, particularly in relation to science & math, but similar changes in other areas (to 5-7 shift in reading in many kids and the shift to greater abstraction in preteen and early teen years).

Yet what might kids be capable of? Perhaps because we have too often taken Piaget as prescriptive- supposedly reflecting what we should and should not be teaching- we have underestimated what kids can do. Most likely at preschool years (because he describes what they don't do more than what they can do), but also possibly underestimate school-aged kids and adolescents (teens may be capable of adult thought- probably because they took adult roles prior to 100 to 150 years ago).

His theory also focused on science, math, and logic, and most examples were given in those areas—harder to apply in other areas.

Perhaps a better use of Piaget's theory is to say it reflects lowest levels likely, not the potential kids have to achieve.

Jerome Bruner has much to offer in terms of children's possible accomplishments and is more prescriptive for teachers.

<u>III. Jerome Bruner</u> makes the case that any area of knowledge can be taught at any age, but needs to be taught in the right way. Of course, we may not be able to teach all of the knowledge, but some aspect of any areas of

knowledge. Perhaps overstated, but possible to challenge kids more than we do.

Three Modes of Representation: (a concept can be presented in three ways)

1. **Enactive**- through actions, use senses, learn by doing ~learn about caves by digging a hole (act out with bodies- drama or physical activity- manipulating)

2. **Iconic-**images

~pictures of caves (pictures and drawings are very important, schematics)

3. **Symbolic-** language

~talking about caves (language builds on action and visuals, not fully understand anything without prior related action and images)

These are parallel- teach with all 3, although often best to start with enactive, then iconic.

Bruner also emphasized that you don't teach it all at once--spiral curriculum: revisit the concept at more developed level over time. Spiral can be first enactive, then iconic, then symbolic over a few days, or be all 3 at progressively more abstract levels over months or years.

IV. Lev Vygotsky

- Russian psychologist
- interactions with more skilled and knowledgeable people is crucial to child (or adult) developing. Piaget emphasized role of peers, Vygotsky emphasizes adults- teachers, as well as peers, especially more skilled peers. Why? More advanced peers and adults push child into ZPD
- space between what can do alone and what can be done with help and instruction. [Bible also emphasizes parents and teachers over peers]
- older peer or adult "scaffolds" learning gives prompts and helpsuntil child does it alone.

Application: peer tutoring if peer is advanced (Apply to riding a bike)

Example/s in the Bible?

Progression in concepts:

- 1. Spontaneous- preschoolers, see outside characteristics
- 2. Scientific- tools to manipulate the environment (rules, signs)
- 3. Theoretical learning- psychological tools, see beneath the surface (mental manipulation), generalize.

V. Lawrence Kohlberg

Levels and Stages

- I. Preconventional Morality
 - 1. Punishment avoidance
 - 2. Positive benefits
- II. Conventional Morality
 - 3. Good boy/good girl
 - 4. Authority and obedience
- III. Postconventional Morality
 - 5. Social order
 - 6. Principles

The last 2 are most questionable- they reflect more of a relativistic view of the world (Kohlberg's values).

Carol Gilligan questions stage 4- says it is male progression, and sexist to say women who are at stage 3 and develop it deeply are not as advanced as people at stage 4.

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 \sim "Emotional Intelligence" would give higher ratings for stage 3 than stage 4.

Different stages reflected in Christian faith. Interesting book on this: *I'm saved, you're saved...maybe.*

Christian songs and organizations

Weakness- little attention to content or morality (just reasoning)

AGAIN- descriptive not prescriptive

Chapter Three: Age-Level Characteristics

Form Five Groups: Pre&K, 1-2-3, 4-5, 6-7-8, 9-12

Each group gets an overhead to present

Creatively present each aspect as a group or individually

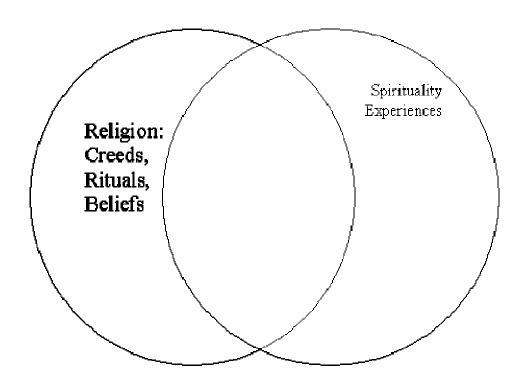
Include possible spiritual/faith implications

Child/Adolescent Spirituality

Peter McLaren describes a "sanctity state" of some youngsters at a Catholic school (high school/ Jr. high)

- sort of altered state, awed by God.
- Some enter sort of a pious posture, trying to act saintly and spiritual norms followed (looks spiritual, but not really experiencing God- like NT phrases).

Recent theory of children's spirituality (David Haye and Rebecca Nye) Spirituality is broader than religion, although religious experience is <u>one</u> kind of spirituality. (Could be caught up in ballgame, a sunset, etc...)



Area of Overlap: Spiritual Experiences of a Religious Nature

- Marked by awe and wonder
- Perceptual difference from normal
- Relatively common in early childhood, rare as people get older
- They found kids didn't want to talk about spirituality, friends and teachers made them think of it as foolish.
- When they did talk about it, they used religious terms (not much vocabulary for topic)

Categories of Spiritual Sensitivity From Hay and Nye, 1998, p. 59

I. AWARENESS-SENSING

- A. Here-and-Now
- B. Tuning
- C. Flow
- D. Focusing

II. MYSTERY-SENSING

- A. Wonder and Awe
- B. Imagination

III. VALUE-SENSING

- A. Delight and Despair
- B. Ultimate Goodness

C. Meaning

A Few Negative Spiritualities [overlaps with what Berryman terms "pseudo-play"]

- 1. Violence
- 2. Suicide
- 3. Bullying
- 4. Illegal Drug Use
- 5. Risk-Taking
- 6. Controlling with Detachment and Disguise (by "spirituality sponges" who are parasites, says Berryman)
- 7. Lack of Moral Impulse/Corruption
- 8. Lack of Concern for Others
- 9. Meaninglessness
- 10. Prejudice
- 11. Materialism

Recommendations for Encouraging Adolescent Spiritual Development Taken from Salt and Light Conference Presentation, 2002, Biola University

- 1. Encourage wholehearted commitment to Christ. Recommitment, or surrendering to the Lordship of Christ in all of life can be understood and affirmed by adolescents, although the scope of surrender should increase with time.
- 2. Read, encourage students to read, or even assign good books on spiritual formation. One of the best, for teens and adults, is Klaus Issler's (2001) *Wasting Time with God*. Small group study of such books may be particularly helpful.
- 3. Using biblical principles, help students critique the current youth culture. It may help to bring in—or have students bring in—lyrics of popular songs and teen magazines. Discuss the reality of idolatry in modern life, both for teens and adults.
- 4. Affirm student spiritual experiences—both religious and non-religious—that do not contradict scripture. Also discuss why some students turn to negative forms of spiritual experience to fill the vacuum that only God can adequately fill.
- 5. Study with your students the lives of Christian leaders and martyrs of the past and present, including accounts of their spiritual experiences. Emphasize how they resisted some of the cultural pressures of their day.

- 6. Encourage an activist approach to Christian living (Campolo & Ratcliff, 1991). This might involve community outreach, overseas missions experiences, letter writing and other political action, and systematic prayer for problems in the world.
- 7. Live a life consistent with biblical principles, including an active rejection of anti-Christian values in the mainstream culture. Share some of your own spiritual experiences and things God has taught you. Your example may help your students reject aspects of youth culture, as well as reflect upon and describe their own spiritual experiences.
- 8. Consider spiritual mentoring (Joy, 2000). Encourage mature adults—even senior citizens—to volunteer as mentors. Mentors may need training. Encourage students to meet regularly with their mentors. However, do not automatically assume a youth leader is mature; adolescents can be manipulated and emotionally abused yet not say anything. Allowing teens to attend another church is better than losing them altogether.
- 9. Be open in dialogue; do not overreact when students are merely experimenting with ideas. Tentative ideas offered by teenagers can sound very much like firm conclusions. Harsh rebuke may end the discussion on everything—permanently.
- 10. Encourage parents and teachers of school-aged children, and younger, to affirm and encourage spiritual experiences (Ratcliff, 2001). If these are suppressed in children, it may be very difficult to reverse that pattern and encourage spirituality in adolescence.

Chapter Four—Understanding Student Differences

The Meaning of Variability:

- Intraindividual variation—changes in an individual's behavior from one situation to another
- Interindividual variation—differences between people at a given point in time

Intelligence theories:

Wechsler—global capacity ("g") but also verbal vs. performance

Sternberg—triarchic theory:

- Practical intelligence
- Creative intelligence
- Analytical

Gardner Eight (or Nine?) Intelligences

- Logical-mathematical
- Linguistic
- Musical
- Spatial
- Bodily-kinesthetic
- Interpersonal
- Intrapersonal
- Naturalist
- Existential/Spiritual

Bible lesson—teach from one of the intelligences

Many Learning Styles

4 major differences between kids:

1. Reflecting vs. Impulsivity

- 2. Field dependent vs. independent
- 3. Self-government styles (pg. 129)
 13 self-government styles (seeing variety and general differences is more important than memorizing all 13)
- 4. Preferences for various learning formats and processes
- 5. Gender--not really differences in learning styles, but gender does make a difference

Applications of learning styles and intelligences to classroom

Chapter Five: Cultural and Socioeconomic Diversity

Culture and Minorities

Historical background

Major shifts in population--within 20 years there will be no majority ethnic group (In a sense don't have one now if Italians, Irish, Scottish, Swedes, etc...)

But major change--Latinos much larger group, and Asian-Americans also major increase

Culture defined:

A term used to describe how a group of people perceives the world; formulates beliefs; evaluates objects, ideas, and experiences; and behaves. ©Houghton Mifflin Company

Culture and the Bible

Culture vs. Kingdom--first loyalty is to Kingdom of God, but affirm aspects of culture that match Kingdom values, stand against culture if wrong morally.

What are important aspects of culture in teaching? Conventions in reading (left to right vs. Hebrew vs. Chinese Space, eye contact, facial expressions, body language Language (preferred language, suppressed language)

Ethnicity and social class influence teacher expectations, and thus, the performance of the students (vicious circle)

Socioeconomic Diversity

SES Differences in Bible

SES most related to income, but also occupation and need

Example: Dominica

SES is only one component of a person:

- Race-Ethnicity-Nationality
- Religion-Worldview
- Exceptionality/non-exceptionality
- Gender
- Social class

Yet SES and cultural group are related

Social class affect teacher expectations and peer expectations

CARE ENOUGH (examples)

Bible and Low SES

- Many verses about the poor relate to SES
- Proverbs seems to balance:
 - o cautions against practices that produce poverty (poverty can be due to carelessness)
 - o and concern for the poor and helpless

Bible Word study (key ideas in verses from Proverbs) –

- What does verse say and
- implications for teachers

Multicultural Education

Guided meditation (see the work of John Coe and Klaus Issler)

- Reflect carefully on Characteristics of Effective Multicultural Teachers (p. 161)
- Pray about each characteristic, a phrase at a time
- Pray for revelation related to that characteristic--either from Scripture or directly from God--affirming or not affirming the characteristic, or providing other insight related to it
- Ask God to reveal the degree to which you should or should not use each characteristic

Alternative activity: Define multicultural education, describe assumptions, goals, approaches, and concepts in a creative manner (such as drama)

Bilingual Education

Learning two languages or one?

- → Used to be: total inclusion without assistance
- → Alternative Learn in own language then learn in English
- → Learn both languages (good for <u>everyone</u>, including English-speaking students)

BUT: Now have many more languages- over 100 in LA schools! Learn 3 or 4 languages? Or just Spanish and English and let rest of kids flounder?

Child culture/ peer culture

Luke 7:31-32

School can be understood as containing two broad cultures of children, as well as the ethnic culture/s that children bring with them. (May also be family culture and church culture that are distinct from ethnic culture/s)

<u>Culture of School</u>- Sometimes called "teacher culture"- emphasizes formality and routine, submission to control and authority of adults, learning values of adult society. Encouraged in schools by emphasis upon same-age peer groupings.

→ "Kindergarten or Academic Boot camp" –Gracey

<u>Child Culture/ Peer Culture-</u> Emphasizes play, many options, norms and values of peers, child folklore, rough and tumble play, and flexibility. Same sex associations in elementary years, hierarchies by age and grade. Often seen by teachers and parents as "inadequate socialization".

Enact

These are often in opposition

example

But some say peer culture can be used to teach:

→ In S.S. "the wise man builds his house..."

Brainstorm: How?

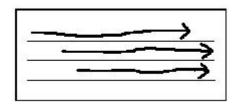
<u>Home culture</u>- a mixture of school and peer, or different?

<u>Church culture</u>—*a mixture of home and school, or different?*

Chapter Six: Accommodating Student Variability

ABILITY GROUPING

- 1. Between-class grouping
 - → Sections have one level of students (high, average, or low ability)
 - → Tracking in high school (first seen in elementary reading groups)



Very little change between groups, so kids learn--via failures or success--what kinds of jobs to which they should aspire.

Problem: Social class clearly related to initial groups, so socialized to stay in our class. –MARXIST

- 2. <u>Regrouping-</u> more flexible- move between teachers according to ability *in that subject* in the grade.
- 3. <u>Joplin Plan</u>- stay with students at that level in that subject, but *across grade levels*.
 - → Grade levels aren't all that old (sacred cow?)
- 4. Within class ability grouping (e.g. reading groups) -still problems with tracking

Debate these four approaches, and a fifth alternative—no divisions
Conclusions about ability grouping from research
Best overall approach in general

Disabilities

We see Jesus' incredible concern with disabled people in Scripture.

Important to you--at front lines--to be sensitive to needs to refer students-you may be their only hope for help.

Indications of Possible Learning Disabilities

(Eggen & Kauchak, 2001; Meece, 1997)

Fidgeting or being hyperactive.

Inattentiveness, easily distracted

Poor coordination or balance

Disorganized, impulsive, or forgetfulness

Does not complete assignments or slow in doing work

Strong performance in some others, but weak in others

Reading lacks fluency, refusing to read, tension when reading, mispronunciations

Word reversals, omissions, additions, substitutions

Words or letters transposed

Book held very close to face

When reading often loses her/his place, very slow reading

Letters are not well formed or jerky

Problems staying in line

Does not recall theme, sequences, or basic facts of stories

Struggles with recalling facts or doing story problems in math

Copying from transparencies or blackboard is difficult

Does not stay in same column of numbers when doing math

Indications of Possible Visual Limitations

(Eggen & Kauchak, 2001)

Book read or examined at an unusual distance

Head is tilted or other unusual position

Eyes squinting or rubbed frequently

Inattention when teacher writes at blackboard

Asks about procedures that are clearly posted in classroom

Nausea, dizziness, or headaches reported

Eyes swelled, red, or crusted

Letters confused or loses her/his place on the page or line being read

Difficulty staying in line

Inappropriate spacing while writing

Indications of Possible Language Disorder

(Eggen & Kauchak, 2001; Santrock, 2001)

Not speaking very much in the classroom or playground

Sentences tend to be short

Gestures used to an inordinate degree

Difficulties in pronunciations

Talks too loudly, high or low pitch, harsh or hoarse speech

Stuttering or other dysfluency

Difficulties in phrasing questions or finding the words they want to use

Omitting key aspects of statements

Misunderstanding directions

Delays in responding to others

Indications of Possible Hearing Limitations

(Eggen & Kauchak, 2001)

Uses more ear more than the other, indicated by cupping an ear or consistently turning one side of the head toward the speaker

Indicates puzzlement or frowns as directions are provided, suggesting lack of understanding

Appears distracted or disoriented occasionally

Frequently asks people to repeat what was just stated

Unclear articulation, particularly consonants

Prefers very loud music or television

Hesitant to be involved in speech-related events

Complains of ears buzzing, discomfort, or earaches frequently

Indications of Possible Giftedness (Eggen & Kauchak, 2001, Woolfolk, 2001)

Persistence at tasks

Imaginative

Prefers to do tasks alone, may be isolated or rejected by peers

Resents interruptions

Pretending is enjoyable

Thinks flexibly

Is quite verbal

Does work beyond what is assigned

Routine activities bore them

May be impulsive and not give attention to detail

Possibly considered a "showoff" by other youngsters

Strong will, lack of cooperation

Very sensitive to rejection, desires recognition, if they do not excel in an area, may refuse to participate

Considered odd or different by others

Sources for above guidelines:

Eggen, P., & Kauchak, D. (2001). *Educational psychology* (5th ed.). Upper Saddle River, NJ: Merrill Prentice Hall.

Meece, J. L. (1997). Child and adolescent development for educators. New York: McGraw-Hill.

Santrock, J. W. (2001). Educational psychology. New York: McGraw Hill.

Woolfolk, A. (2001). Educational psychology (8th ed.). Needham Heights, MA: Allyn & Bacon.

Distribution of children receiving "special education" (p. 194)

IDEA

- Least restrictive environment
- Mainstreaming—as much as possible in regular classroom
- Inclusion—entirely in classroom (sometimes with assistance)

IEP--Unique needs of child, not a "cookbook" approach.

Provisions of IEP:

- Current level of performance
- Goals and objectives
- Education needed and services planned
- Level of mainstreaming/inclusion
- Initiation date and duration of help
- Evaluation and criteria if objectives are accomplished

Example: p. 196 of text (usually IEP's are several pages in length)

Mental Retardation

* Mild- 85% of MR

Can be independent or adult, some academics as a child

* Mod- 10%

Can hold supervised jobs or adult, not usually independent.

Most Down Syndrome individuals (but not all!)

* Severe & Profound- 4-6%

Continual direction and supervision. Usually walk and talk some, sheltered workshop.

A personal example/ "I Am Sam" movie

"If you do it for the <u>least</u> of these, my brother, you do it for me." ~Jesus said (people with mental retardation can be saved)

There is hope for an independent life- if they get adequate training and early diagnosis. Need to care for them, teach skills, and help them gain independence to degree possible.

Gifted Children

[From Title IV, H.R. 5, pp. 227-228] "The term gifted and talented children and youth means children and youth who give evidence of high performance capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who require services or activities not ordinarily provided by the school in order to fully develop such capabilities."

Often overlooked, or they merely skip grades. Skipping grades means they may also skip content, which may shortchange them, and the social needs may not match their intellectual or other areas of excellence.

Chapter Seven: Behavioral and Social Learning Theories

Behavioral Theory

Basic principles:

- Reinforcement of desired behavior—to make it more likely
- Remove reinforcement of undesired behavior—so it will not be encouraged
- Negative consequences to undesired behavior—so it will be suppressed

The story of "Little Lisa"

Teaching to self-feed

With the possible exceptions of M.R. and/or autistic children, a complete "behavioral classroom" may be inappropriate. Yet the general principles behind the methods are implicit in any good teaching:

--break things down into manageable steps and make learning a pleasant experience.

Limitations:

- Results may be temporary (that may be enough)
- Can promote materialism (as does television, computers, school, etc.)
- Extrinsic motivation can decrease intrinsic motivation (if high interest in activity, rewards are promised prior to activity, and if teacher ignores quality of performance)

YET

- Extrinsic motivation *increases* intrinsic motivation if task is moderately challenging and there is excellent performance
- Extrinsic motivation that helps children succeed is better than failure from lack of intrinsic motivation
- You don't have to use material rewards: praise your children
 - o For genuine success (and be genuine in your praise)
 - o Space out praise (more at beginning)
 - o Don't embarrass children with your praise

o Praise in a manner that the child values

Social Learning Theory- Albert Bandura

Observation and imitation are central ideas; less emphasis on reinforcement in learning.

- 4 Types of Social Learning:
 - 1. Inhibition- Learn not to do things because others don't

Examples

2. <u>Disinhibition</u>- See others doing things they normally wouldn't (because of social disapproval), so they imitate

Examples

3. <u>Facilitation</u>- Doing what normally wouldn't because of lack of motivation

Example

4. <u>Observational Learning</u>- Just plain watching and imitating Overhead

Example

DRAMA

Process involved in Social Learning Theory: (Need all 4 for it to work)

- Attention --must pay attention
- Retention --recall
- Production -- capable of doing it, refine it as learn it
- Motivation –receives an outcome that is valued (Or at least see other person as rewarded and thus anticipates reward (or reward self)

Self-efficacy "How capable or prepared we are for handling particular kinds of tasks."

"I can do this" vs. "I can't do this" (contrasts with self-concept--the global overall picture of self)

What influences self-efficacy? (causes)

- 1. *Past experiences*--how we have done with the task in the past (or similar tasks)
- 2. *Persuasion of others*—they try to convince us we are capable, which make us feel more capable (they express confidence in us)
- 3. *Emotions we feel when we prepare to do a task*--fearful/anxious **vs.** assured/comfortable (physical reactions)
- 4. Success or failure of others we identify with influences our assurance of capability ("vicarious experience")

How do each of the above four relate to our confidence in God?

How can each of these be encouraged in class to increase self-efficacy?

Types of behaviors influenced by self-efficacy (results of self-confidence):

- 1. Self confident people tend to consider a variety of goals and participate in a variety of activities if they feel capable.
- 2. They are likely to solve complex problems using more advanced thinking styles (analysis, synthesis, evaluation- not just facts)

- 3. Work harder and longer for goal if they feel capable (don't give up quickly) even if they hit roadblocks and problems
- 4. People who feel more capable tend to have more positive emotions as they do tasks in that area (enjoy it, really excited by it) (not on overhead)

Do Computers Aid Learning?

Trends in the research to date:

- Drill-and-practice programs tend to be less helpful, while simulation programs are more likely to result in learning
- Computers tend to increase reasoning abilities and abilities at problem-solving
- Computers appear to be especially effective at helping elementary children who are low-achieving

Chapter Eight: Information Processing Theory

Stages in Processing Information:

Blank diagram on board

1. Sensory register

Example: The Eye Memory Task

2. Short term memory

Example: Digit-Span Test (try this with kids)

3. Rehearsal

Variety is an important key, not just rehearing the same thing in the same way endlessly (rather inefficient, especially if conceptual understanding is the goal). See self-questioning stems (p. 281 of text)

4. Long term memory

Forgetting at stages 1, 2, or 3 is considered to be decay, to never be recalled again. However, if a memory is in long-term storage, some believe it is never lost (but may not be retrieved) unless there is physical brain damage that removes the memory.

5. Retrieval from L.T.M.

May have a memory but not be able to recall it. Why?

- Interference (similar things interfere with one another)
- Inadequate linkages to other knowledge/memories
- Inadequate understanding to begin with
- Blocking (repression, suppression)

Metacognition—ability to think about thinking, planning, evaluating one's learning.

Learning Tactics and Strategies (these aid long term memory and retrieval)

- A. Rehearsal
- B. Mneumonic Devices (p. 279)

Generate Classroom Examples of Each

- Rhyme
- Acronym
- Acrostic
- Method of Loci
- Keyword

C. Self-Questioning and Peer Questioning

D. Notetaking

Brain Development

Brain controls body, Christ is head of church (we should do his will)—Eph. 1:22. We are made in God's image (Paul Brand on brain function and brain surgery in *In His Image*), thus perhaps brain reflects something of God.

Three parts of brain (according to secular sources):

- 1. Lower Brain- spinal cord and central area- relates to arousal, screens data.
- 2. Middle Brain- limbic system- relates to emotions
- 3. Cerebral Cortex- thinking and acting.

All 3 are intricately connected so that most of the time all 3 work together as a unit. (Psalm 8:3-9) A reflection of the trinity??

Why should we study the brain? Because ultimately, nearly everything a child learns relates to cognitive development, and even physical development is controlled by parts of the brain. All the theories and research must eventually be related to the brain functioning in some way. But the brain is complex and research on its development is very new and tentative.

History

- Ancient Greeks: Pythagoras (and others of his era) saw brain as center of reasoning, Hippocrates believed paralysis was due to brain damage. Some ancient Greeks believed ventricles were related to movement and mental abilities (they are merely reservoirs of fluid).
- Middle Ages: Galen thought frontal lobes were location of soul (some of the church fathers accepted the Greek ventricle theory)
- Gall thought specific abilities such as reading and writing were in specific areas of the brain. Gave birth to phrenology in 1800's.
- Phineas T. Gage—personality change from physical damage

- Luria's built on Vygotsky's theory and studied soldiers with wounds to the head, gave them extensive tests, then autopsied for specific locations of the wounds, linking location in the brain to dysfunction.
- Penfield probing experiments in Canada during brain surgery
- Sperry's experiments—severing the corpus collosum

Lower brain: brain stem, reticular system, cerebellum

Damage in this area is likely to produce problems with arousal, such as somnambulism. ADHD is sometimes due to dysfunction in this area of the brain due to damage or developmental difficulties. This part of the brain develops prior to birth and is fully mature by 12 months following conception. The cerebellum is related to balance and movement.

Middle Brain: The Limbic System

Related to emotions, smell, encoding of memories (but not storage of memories), and some automatic activities (digestion, circulation, etc.). Damage here may result in problems learning and emotional problems.

Cerebral cortex development-

PRIMARY AREAS develop during the first 2 years. Receive sensory input or sends out commands to muscles. Problems in this area can produce paralysis or problems processing visual, auditory, or tactile data.

SECONDARY AREAS interpret and analyze information. Develop between birth and 5 yrs. or so. They dominate until about 5-8 yrs. Thus during this time most learning is within a single modality (hearing not well integrated with vision, tactile not integrated with movement, etc...). Thus not highly coordinated and skilled, rote memory is used to read rather than phonics (use phonics later).

TERTIARY AREAS- advanced integration of understanding, greater complexity in processing. These are cross-modalities.

A. Tertiary Parietal Area (sometimes called tertiary parietal-occipital or "angular gyrus"). Become mature by age 5 to 8, can mature as early as 2 or as late as 12. Related to most elementary <u>educational skills</u> (reading, writing, spelling) and IQ scores.

If age for school is defined as age 6 (as it is by most educators- "kids read then") the 10-40% of children are defined as abnormal!

"Development lag"-slower development but eventually does as well as other children (assuming he/she is not labeled and becomes convinced s/he is unintelligent). "Late bloomer"

[Also hippocampus matures at about 5- advanced memory abilities]

[Pressure to read before ready--possibly contributes to dyslexia]

Many special ed. problems relate to brain problems

- **Learning disabilities**--tiny area of brain not functioning normally, often in secondary parietal areas of left hemisphere- (may also be learned via pressure to read too soon or due to other emotional difficulties).
- Mental retardation--larger areas of brain not functioning, especially tertiary parietal sections (unlikely to be learned, but slow child may be considered retarded when not- via low expectations).
- *Visual/Perceptual problems*--may be from primary areas or secondary areas. Makes learning difficult because information must go from primary to secondary to tertiary for reading, writing, spelling, etc.

B. Tertiary Frontal (prefrontal)

- Abstract reasoning
- Roughly equivalent to Piaget's formal operations
- Less impulsive (but if damaged may become *more* impulsive)
- Self-control of hyperactivity for many teenagers/adults

- *Wernicke's area* where sounds are processed- related to understanding language (in temporal lobes)
- <u>Broca's area</u>- where speech is controlled- related to language production (in frontal lobes)

Damage to either of these areas can produce partial or complete loss of hearing or speech. Sometimes children's limitations in these areas are due to abnormalities or lack of development in these areas.

Brain development involves several processes including mylenization

 Covering around nerves that make impulses travel faster and do not spread to nearby neurons as much (behavior= more coordinated, precise. Thinking is also more coordinated and precise)

Lateralization occurs

- one half of brain becomes dominant

- o Usually left half, so people are right-handed
- o If right half is dominant, often (but not always) left-handed.

Consequences: left-handed kids tend to be more verbal, more likely to be artists, musicians, draftsmen (spatial skills and music appreciation are in the right hemisphere)

Mixed dominance- more problems in school (e.g. right dominant with eyes, left dominant with hands)

Chapter Nine: Constructivist Learning Theory, Problem Solving, Teaching for Transfer of Learning

CONSTRUCTING

Constructivist approach <u>plus</u> knowledge (need content to construct with) To adapt to change- facts alone can be outdated, not help with changing context.

Early influences

- ✓ John Dewey--reacted against memorization of isolated facts (drill and recitation)
- ✓ Bruner--discovery learning- give kids problems and let them come up with solutions (teacher facilitates by setting up problem and gives occasional nudges)

Cannot do this with every topic- too inefficient- but good to find some area or occasional lesson in every topic to encourage discovery by self or in peer group.

In what possible areas can you use discovery learning in teaching?

✓ Piaget and Vygotsky influenced constructivism (p. 306)

Three facets of Constructivism

- 1. *Child enters with a personal world view* (begins creating at birth or possibly before birth).
 - \rightarrow Includes skills and knowledge, created in distinctive way (<u>her/his</u> construction)--not just result of the teachers--although they <u>do</u> influence (not just parents either).
- 2. *Knowledge is not totally transferred* not "cram it in," fill up brain (empty jug theory). <u>No</u>—children (and teens and adults) construct understandings, using bits and pieces as understood by the person
- 3. There <u>are</u> overlaps in peoples' constructions

- Not totally idiosyncratic (Edith Schaffer brings the tea)
- Consistency across people, not just own world, thus multiple perspectives are good--push away from egocentric world

What helps kids construct well?

- 1. Apprenticeship--example of teacher
 - Shaping, encouraging, but especially modeling what is desired.
 - Watch first, then begin with assistance, eventually independent.
- 2. Learning is situated--so need realistic contexts (bring in newspapers and plan family budget from ads). Too much education is decontextualized--separated from real applications-so lack of transfer and lack of meaningful construction. Need holistic instruction--projects that cross disciplines ("delight directed studies" in home-school terminology).
- 3. *Multiple perspectives needed* variety of ways of doing things, so not locked into one alternative. Instead of one answer, look at alternatives and encourage thoughtful closing. DIVERGENT THINKING.

Three Types of Problems

Well-structured problems

Biblical example:

Ill-structured Problems

Biblical example:

Issues

Biblical example:

Five Steps in Problem Solving

1. Admit existence of problem

- 2. Comprehend what the problem involves
- 3. Seek out information relevant to the problem
- 4. Develop and implement a solution
- 5. Evaluate the results

Biblical example of five steps

Flaws in problem solving

- *Hasty generalization*. Have only one or two experiences and immediately draw a conclusion.
- Flawed heuristics

 (an intuitive shortcut used informally to solve problems, but doesn't always work)

Example: <u>overconfidence</u>- people tend to have too much confidence in their own conclusions (the reason kids don't check their math problems by working backwards, and the reason college students don't double-check/proofread their papers, or even have others proofread them).

Warnings do not improve accuracy, but ex	posure of others'
mistakes do. –Prov. 11:14, 24:6	
e.g. Population of New Zealand is between _	and

Adaptive value of overconfidence--easier to make tough decisions and tend to be happier. 86% say that their own job performance is above average, only 1% say below average.

Survey: Who is most likely person to go to heaven?

Transfer of Learning

- *Positive Transfer*--prior learning helps current learning (could be intentional--spiral curriculum)
- Negative Transfer- prior learning hinders and distorts current learning
 - o different definitions- e.g. stats from different professors sometimes causes this problem)

- Example: learn decimals, then learn percentages, so write 1% as .01%
- Zero Transfer- prior learning has no effect

Personal example

- Low Road Transfer--skills with little or no thought
 - previously learned information retrieved almost immediately and quickly applied (generalization)
 - → Must have practiced a lot
 - → Varied practices in variety of settings and multiple materials

example: riding a bicycle

High Road Transfer

--with effort develop an abstract understanding that can be applied (e.g. a strategy)

example: troubleshooting in electrical wiring or electronics

Teaching for Transfer

- ➤ Classroom instruction arranged so students recognize similarities between ideas and learning situations
- > Students independently apply knowledge and problem-solving skills across school subjects
- ➤ Problem-solving skills also applied outside the classroom
- Essential to becoming an autonomous learner and problem solver

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Chapter Ten: Approaches to Instruction

Behavior is traditional focus of objectives- in 1970's, objectives emphasized <u>observable</u> behavior, now expanded to other measurable goals in objectives (cognitive is indirectly reflected in actions).

Good objective has 4 aspects (Mager):

- 1. Student action (not teacher)
- 2. Action/performance- tangible, not vague and mentalistic
 - → May need to task analyze

Task analyze using a concordance:

- 3. *Context* what are the conditions, what are the "givens"?
- 4. *Criterion* what is standard (100%? 9 out of 10?)

Fifth graders: How to use a map

- -objectives
- -short lesson from humanistic, behavioral, cognitive, or social learning perspective

Objectives for teaching ten commandments

One needs to use objectives for long-term goals as well as planning for more immediate learning of skills and knowledge.

Taxonomies- <u>kinds</u> of objectives (Bloom)

- I. <u>Cognitive</u>- 6 subtypes (pp. 341-342)
- II. <u>Affective</u>- 5 subtypes (pp. 342-343)
- III. <u>Psychomotor</u>- 7 subtypes (p. 343)

Approach to Teaching

• Behavioral

Classroom rewards might include points added to grade for cooperation, attitude, participation, or whatever is counteractive to likely problems. In elementary level, attention can be a key reward (or praise). In upper elementary and higher, grades given are more likely to be rewards, while restrictions and even expulsion can be punishments. Sometimes rewards can embarrass.

Personal example:

• *Cognitive*- help child with develop adequate schemes= representations of world.

Glasser- students need success in at least one area to be successful in life. Find one strength, ability, skill for each child that is excellent.

Concept Maps

- shows how ideas relate to one another (actually related to info. processing theory)
- *Note:* illustration on page 354 shows 2 concept maps for the same ideas. Shows there are multiple ways of constructing.

Do concept map for one section of chapter in small group (don't look ahead!)

For concept maps related to constructivist, humanistic, and social learning/cooperative learning approaches, examine the next few pages (and the last few pages of every chapter of this coursepack!).

Chapter Eleven: Motivation

Behavioral Learning

Why <u>do</u> students do these things?

- Reinforcement
- > Punishment
- Class conditioning
- ➤ Modeling

BEHAVIORAL LEARNING THEORY CAN EXPLAIN ASPECTS OF MOTIVATION

- Why students work on assignments they don't want to do
- ➤ Why students keep working toward a remote goal
- ➤ Why some students like a subject while others hate it
- ➤ Why a student may want to please one teacher but not others
- ➤ Why a student may want to be like a friend who does schoolwork well
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Maslow's Hierarchy (p. 393)

What can be done to help at each level? (Don't rule out Child Protective Services)

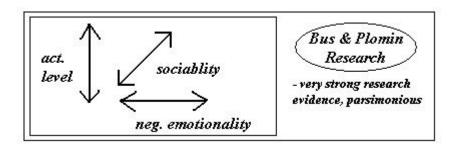
Each level is cumulative

Top level requires person to affirm values such as truth, goodness, beauty, justice--strong Christian values. These values are needed; could be affirmed and taught with Bible accounts or similar stories in contemporary situations--VeggieTales

Temperament

Temperament and Personality

Biblical examples



[Also see chart on next page for 3D version of this theory]

Activity level= tempo (speed) + vigor (intensity)

Negative emotionality= anger + fear

Sociability: (some of these are not fully developed until after infancy)

- Presence (around people, not withdrawn)
- ➤ Sharing (sharing activities with others)
- ➤ Attention (gets the attention of others)
- Responsivity (reacting to others, conversation is like a ping-pong game)
- ➤ Initiation (outgoing- seeking others)

Why no positive emotionality?

- early temperament theorists included it
- newer research, using factor analysis, shows it doesn't hold up consistently
 - → Consistent happiness may be an acquired (learned) personality trait, not an inborn temperament. From birth you see distress or no emotion, smiles come later.

If one has generally positive emotions, they are usually very sociable (sociable is more consistent. But negatives--sad/angry--are very consistent in some people)

What differences do these aspects of temperament make in the Christian life?

One aspect of temperament Christian Psychologist James Dobson calls *willfulness*. His vivid description:

- ✓ Some babies are born agreeable, happy, content to wait, etc...
- ✓ Others are born with a cigar in the mouth, complaining about the temperature from the moment of birth.

Most things in life are normally distributed (bell curve)

Dobson originally thought this won the case with willfulness. But after talking with "at least 25,000 married parents" he concluded it was a "skewed" curve, with more children at the defiant end of the spectrum than were at the compliant end.

But he admitted that perhaps it just seemed that way- especially when they are toddlers.

Actually Dobson was getting at one aspect of temperament, sometimes described as "negative emotionality." This is one of three main dimensions of temperament in research of this area.

[see my web page: http://don.ratcliff.net/conferences/temper.html]

Chapter Twelve: Classroom Management

"Even a child is known by his behavior, if he's bad or good"

Four General Styles of Parenting/Teaching:

1) Authoritarian

Set expectations, absolute standards that can never be questioned. No explanations for rules. Very rigid approach. Danger of cruelty

2) Indifference

Undemanding, unresponsive, minimal involvement with kids. Very common today – TV and school raised kids, parents at work or preoccupied with selves. Only do parenting tasks if convenient (usually isn't)

Danger of neglect

3) Permissive

No standards, may try to reason with child but no force, allowed to regulate self. Used to be very popular with psychologists & society in general, but many psychologists have moved from 3 to 4 (many parents from 3 go 2)

Danger of indulgence

4) Authoritative

Definite rules & guidelines, but explanations given, discussion oriented, flexible parents, but parents willing to enforce expectations. Individuality of child encouraged.

Danger of overprotection

Which is Best? Research on parenting found:

#4 children are more independent and responsible. Kids need expectations, yet also need good communication & flexibility.

Control & support encourage acceptance of faith.

- #3 children tend towards dependency. Boys more likely to be hostile (even sociopathic), girls withdraw & have low goals. Cannot tolerate frustration.
- #2 produces aggressive, demanding children (possibly sociopathic at extreme), at least in early childhood.
- #1 parents tend to produce kids that are dependent and withdraw, sons are more hostile while girls have low goals. Kids more likely to develop externalized religion, not internalized.

Six Aspects of Group Management--Kounin

- 1. Ripple effect
 - * Avoid angry outburst. "In your anger, sin not." "Don't let the sun go down on your wrath"
- 2. "With it"
 - *"always be watchful"- Bible
- 3. Overlapping activities can be handled
- 4. Keep interruptions of ongoing activities to a minimum
 - * Smoothness- "do things decently and in order"
- 5. Whole class alert and involved
 - * "Enthusiastic"- zealous ("don't be weary in well doing")
- 6. Name misbehavior and specify better alternative

Group activity: What rules would you require for your students? What are the consequences if a student doesn't follow the rules? Share lists, discuss pros and cons of rules.

Don't have a rule unless:

- 1. you are sure you need it (some rules may need to be retired—and some teachers!) "Tyranny of the shoulds" –Karen Horney
- 2. you are willing to enforce it- "Jonathon Herrington Barrington Green" by Calvin Miller

Agree or Disagree:

✓ "If you have too many rules, you won't have enough time to teach"

- ✓ "Misbehavior is often a result of poor teaching"
- ✓ "You need to love your students, not hurt them"

Marginal use of interpretation—emphasize actions, not intentions

Enact some of the "Dealing with behavior problems"--group of 3 or 4 plan for 5 minutes (can rehearse outside then play it out in class)

3 Ways of Preventing Violence:

- 1. Circle meetings in class and student councils (William Glasser)
 - share decisions on rules and school
- 2. Conflict resolution
 - student monitors intervene to help mutually acceptable agreement
- 3. Academy approach
 - large school (about 1,800 students) broken down into 6 self-contained units. Small classes, family-like environment. (Perhaps more community schools?)

Chapter Thirteen: Assessment of Classroom Learning

Assessment

- takes up to half of teacher's time and written tests make up about half of students' grade.

Involves:

- ✓ *Measurement* assigning a number to students' work
- ✓ Evaluation- worth or value of measurements (usually grades)

Formative vs. Summative Evaluations (important for teacher)

- ✓ Formative- During learning process, you check how they are doing. Can be informal (just verbally ask questions)- not to assign grade, but to see if they are following you.
- ✓ Summative- Evaluate end result, at end of unit or end of marking period- did they meet the objective(s)? Grade results.

May also assess to determine a diagnosis (LD, MR, other learning problems)

Assessment can help motivate students. Need 6-7 tests each semester (one every 2-3 weeks). More often does *not* increase motivation.

True for college students as well?

Midterm and final is easier for teacher, but tend to have two big study sessions as a result.

Weekly quizzes really get tiresome to students and teachers. So ideal may be similar at college level--4 or 5 exams (plus other evaluations?)

What kind of test is best? Pros and cons of each:

- Selected response (Multiple choice, T/F, matching)—p. 457
- *Short answer*—pp. 457-458
- *Essay*—p. 458

Performance testing attempts to overcome some of the limitations of classroom testing. Emphasis is on realistic application of knowledge. (example—see p. 461)

- **4 Varieties:** (pp. 459-460)
 - Direct Writing Assessments (e.g. term paper)
 - Portfolios
 - not just a collaboration of things but also has your distinctive touch (preferably web-based)
 - *Exhibits* (drawings, videotapes, models)
 - *Demonstrations* (problem solving or task performance)

Scoring Rubrics (see page 463 for example)

-help in scoring performance assessments

-competency paper had a five point rubric (1 or 2 was failing, 3, 4, or 5 was passing)

Funny Rubric

Evaluate Student Learning

GRADES- Gal. 6:6

Norm-referenced VS. Criterion-referenced

- *Norm-referenced* (good for admissions, GRE's, ACT's, SAT's, <u>not</u> for classroom) (97= C at one school)
- *Criterion-referenced* (better for classroom but need some normative information to establish the objectives/standards.)

Debate pros and cons: Choose 4 people as spokespersons, 2 on each side. In four groups help your spokesperson prepare his/her side of the debate. By toss of coin, decide who goes first, then opposite, then second person plans on first side and last.

Table of specs for test—p. 481 (great form to use!)

Mastery approach to grading (pp. 471-472)--

 \rightarrow a criterion-referenced approach--some good ideas, but a bit much for 1st year teacher- can build up to it.

 \rightarrow 13 steps:

Debate which of the 13 steps are desirable and which are not

Practices to avoid (pp. 472-475)

Chapter Fourteen: Understanding and Using Standardized Tests

Key Aspects:

Reliability- consistency in measurement

- → Test- retest reliability- same score if you give the test a second time
- → Alternate form reliability- same score if you give an equivalent form of the test
- → Split-half reliability- alternate tests are equivalent

Validity- test measures what it is supposed to measure

- → Content validity- how well test covers the knowledge and skill it is supposed to (ACT, SAT)
- → <u>Predictive validity</u>- if test predicts H.S. student will do well in college, they actually do (probabilistic). Such tests often predict .60+
- → <u>Construct validity</u>- how well test measures a theoretical construct such as "intelligence" or "personality" [what goes with the construct theoretically?] Then see if it does to see if test is valid. IQ and GPA

Normed excellence- does this group you are studying fit the norm group. Do the norms fit your kids (inner city school vs. normed on suburban middle class kids- not a good match; not normed excellence)--a problem with schools

Examinee Appropriateness- text doesn't fit those studied- such as a test over one sixth grade social studies text might not be appropriate for students who studied another text

Achievement tests--Find areas of need

- How do kids in this school compare with other schools in state, in nation
- How does one child compare with other kids in the grade and school

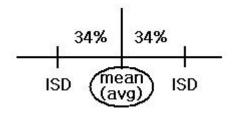
Diagnostic tests--Goal is to determine if child has significant diagnosable problem or can receive special services.

IQ- to see if M.R., L.D., gifted Other tests also needed for any of these (not just IQ) One specific variety of achievement tests is a <u>competency test</u>. E.g. basic skills test to get a high school diploma (or a specific <u>kind</u> of diplomageneral, honors, etc...)

Aptitude tests look at what might be learned by student given the right instructions and motivation- what is possible (not what they know- this is achievement)

[no test can perfectly isolate potential]

Norm-referenced tests- your score fits somewhere on a bell curve (p. 498)



*Standard deviation- distance on a graph from the norm (average).

*Another common way of expressing scores is via percentiles (percent of people below you). So 50 percentile is a good score: perfectly average-parents often confuse percentiles and percentages

*Also common to speak of grade equivalent

A third grader who gets a 4.5 has the same score as a typical 4th grader halfway through the year (does not mean the child should skip gradethere are aspects of the subject that the test did not cover, and the child might miss those)

*t scores, z scores- used by psychologists and researchers

stanines--(not many tests use this today)

Performance based testing

Not just knowing, but actually able to do the task

Tests can be misused-

Gifted minorities may not do well on IQ tests normed with middle class whites

Test score pollution- coaching, teaching for test. Good becomes good test score instead of practical use of knowledge. Even some documented cases of actually stealing test items from test.

Chapter Fifteen: Becoming a Better Teacher

Good book: <u>Strategies for Effective Teaching</u> 3rd ed. Allan Ornstein & Thomas Lasley (McGraw Hill)

Who was your best teacher in school? (elementary, middle, or high school) What made them terrific?

Many topics in whole course can help you be a better teacher

- ✓ Child development
- ✓ Understand social and cultural diversity
- ✓ See individual differences and teach in a variety of styles to fit with differences
- ✓ Theories provide insight and alternative methods
- ✓ Motivation and classroom management
- ✓ Assessment- good teachers assess well (and varied assessments)

Also need to look at Jesus, the Master Teacher

<u>Teaching Techniques of Jesus</u>- Herman Horne

<u>Teaching Like Jesus</u>- LaVerne Tolbert (graduate of Biola University (Talbot School of Theology)

- Jesus used audiovisuals (wrote in sand)
- Jesus spoke to the needs of the people
- Jesus involved people (took child on his lap and said "unless you become like this child, you can't enter the kingdom."

5 things that can help improve teaching

1. Student evaluations, suggestions

-formal (ratings and written)
informal (watch kids as you teach, talk to kids)

"Descriptive Ranking Form for Teachers" in text (p. 520). [See the Cosgrove source for details on how to use it.]

2. Peer Assessment

-Flander's scale often used- ten categories of behavior (p. 520-521)

Can check these every few seconds, but need some training and practice. Tells you what percentage of class is spent with each activity.

3. Self-assessment

-we tend to fool ourselves- recall our best moments (or worst moments)

Can tape part of a class and use Flander's scale when you listen. Text recommends that you tell the kids. Or use videotape (put it in a corner so that it's less conspicuous). Or possibly let the kids take turns running the camera.

Can play back for yourself--or have the kids watch the video and comment.

Reflective Lesson Plan-seems pretty obvious--why not just put comments in journal?

4. Develop and use a reflection journal

Keep track of ideas from classes, other teachers, own memories, magazines, etc.

Example—p. 524

Record your own reflections and observations about your teaching. Keep track of what works, what does not, ideas for changes. Easy to forget ideas if you don't write it down

Can also use insights from scripture or your personal time with the Lord.

Reflection journal can also give ideas for portfolio. Portfolio shows phases of your thinking and development, not just the finished product or best work (but you might prune it for a job interview) (or have several portfolios)

Can also track children's development and changes in your classes in the reflection journal.

5. Technology as an aid for reflection Can put reflection journal on computer (easier to add things later in the right place, or place hyperlinks to various topics)

Digital portfolios—either online or on CD-ROM (again, probably have several versions of portfolio, depending upon who is likely to see it—public vs. prospective employer

On-line discussions with other teachers

On-line case studies, even with video segments, to spur reflections by teachers. Watching a segment several times closely can really help.

Source of training before becoming a teacher; inservice training as a teacher.

"Portfolios Give Prospective Teachers an Edge When they Interview for Jobs" (pp. 528-529) —really great! But need to move from paper to CD-ROMs and/or internet.
--portfolios most likely to make a difference (give you an edge) when the decision is down to the last two or three candidates for a position.