

Toward a Learner Centered Approach in Education

Dr. Barry Shane

Professor, Oregon State University,
Emeritus

Economist, August 28, 2004

Page 66 – Economics Focus

“If you measure actual skills rather than educational qualifications, human capital becomes a strong predictor of economic growth.”

Related to Learner-Centered Learning?

It is what graduates can do that improves a country's economic wealth not the number of degrees granted

Economist study

Countries with the fastest growing skill levels between 1960 -1995 = highest productivity per worker (Belgium, Finland & Italy)

Why Talk about Student-Centered Learning?

- Student-Centered learning is the natural way to build skills
- We know traditional classroom delivery does not build skills

This Evening's Presentation

- What is the Student-Centered approach?
- From Experience What We Know Now
- What System Changes are Important
 - How do we move an educational system toward the Student-Centered learning
- How Administrators might Motivate Teachers to Change

What is Student-Centered Learning?

- Students explore & solve problems in place of lecturing
- Active problem solvers rather than passive recipients
- Teachers do not lead or control
- Teachers are the guides on the sides, not the mentor in the center

What is Student-Centered Learning? (2)

- Learner-Centered Learning is problem based
- How do students discover necessary information to solve problems
- Example – Should I invest in MaMa or 4-Me

MaMa vs. 4 – Me

- How can we compare the companies?
- Is it easy to compete with them?
- How do we determine future earnings?
- How do you evaluate a company's worth?

Watch Children at Play

- Learning & discovery are natural & go together
- Children learn this way outside a classroom in everything they do
- We all learn this way; usually we prefer it
- Who has a mobile phone?

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Traditional Classroom

- Facts
- Individual work – little interaction with others
- Passing a test
- Receiving information
- Technology separate from learning

Student Centered

- Learn to Solve Undefined Problems
- Interdisciplinary knowledge
- Finding information
- Learn to manage projects
- Technology is part of student learning –
applying information sources on the net
(12 year olds creating a multi-media presentation)

What is Different from the Traditional Classroom?

- Students must:
 - Defend their opinions
 - Speak out -demonstrate some aggressiveness
 - Take risks w/o all needed information
 - Recall is irrelevant – memorization is not important
 - Problem finding & solving is everything
 - ✍ Students respect ability & performance

Student-Centered, What We Know

- Student-Centered increases skills more
- What takes a long time?
 - Implementing it
 - Training teachers
 - Developing an integrated curriculum
 - Changing curricula
- Spectacular results do not come right away

What will be New for

- Teachers
- Students
- Administrators

New for Teachers (1)

- Feel uncomfortable – Socratic method
 - Ratings/Evaluations may drop
- Need to be experts – may be threatening
- Now need to know how people learn
- Usually on “auto-pilot” teaching a unit.
Done it this way for years, why change?

New for Teachers (2)

- Teachers must participate in learning carefully (not lead it)
- Design lesson (units) plans around how students access information
- May have to use new computer technology

Teacher Complaints

- If I spend time on active exercises, I will never get through the lesson plans
- If I don't lecture I will lose control of the class
- Students do not read assigned readings
- Students trained to find the right answer – can not do open-ended problems

Students will Resist

- Do not like having support withdrawn
- View SC approach as a personal threat
- Some become hostile when there is no choice
- Complain about being responsible for their own learning
- Not like working with others
- Responsible for their own technology

Student Trauma & Grief

- Shock
- Denial
- Strong emotion
- Resistance & withdrawal
- Surrender & acceptance
- Struggle & exploration
- Return of confidence
- Success & preference

New for Administrators

- Training time may be considerable
- Evaluating & monitoring teachers are now more challenging
- Now we have to motivate teachers to change
- Additional rewards may not be available

Expect that resistance is a natural part of this change

Frequently Asked Questions

- Can you guarantee students skill outcomes? No
- Do we need to develop standards? Yes
- Coordinate with other teachers? Yes
- Will this happen quickly? What does?
- How do we evaluate teachers? Student Performance?
- What incentives can be used?

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Major Parts to Changing any System

- Technical – Are necessary technologies in place?
 - Libraries, Computers, Internet
- Financial – What are the costs?
 - Additional resources, Information Access, Hardware
- Operational – Are the people capable?
 - Administration, Teachers, Students, Parents,

Serious Cultural Issues

- Memorization vs. Solving Problems
- Standout vs. Low Profile
- Deference vs. Competence
- Credentials vs. Performance
- Seniority vs. Capability

Start at the Bottom Grades

- Easier for the teachers
- Places pressure upon the higher grades (teachers)
- Can be done gradually – teachers can prepare
- Add levels as the students move up

Start at the entry points

- Entry points at each school level – not just with small children
- Students more adaptable upon entry
 - ✍ Allows other instructors to see the results
- How can administrators motivate this process

Evaluate Students in More Ways

- Standard tests are always possible – no need to change those
- If you don't test, no one will believe you
 - ✍ People move in the direction of rewards
- Many universities in the U.S. accept a portfolio of work from applicants
- Consider unusual learning experiences as superior to traditional experiences
 - ✍ Most of what we have learned and use is the result of our own problem-based learning

Evaluate Teachers in New Ways

- If students are evaluated on performance based skills; teachers may need to be monitored & evaluated differently
- Major task for administrators
 - Should be in a state of development for a long time

Work with Schools and Universities on Admittance Standards

- What admission standards to use – public universities?
- Almost all companies preparing home school materials use student-centered approaches
- Home schooled children score higher on National tests in the U. S.
- Home schooled children consistently have higher grades in colleges

Administrative Issues

- Achievement Standards
 - Major review of scope & sequence
 - ✍ Integrated Curriculum
- Plan to introduce Student Centered Learning to each stakeholder → need acceptance
 - Teachers, Parents, Students & Administrators
 - Expect long time for adoption

Administrative Issues (2)

- Who will approve the new courses? What experience do they have?
- Will all schools adopt the same standards?
- Who gets credit if Student-Centered Learning works?
- What if Student-Centered Learning fails?
- Cost of storing & distributing knowledge

National Exams Need more Open-Ended, Multi-discipline Questions

- Start with a few
- Plan to add more in subsequent years
- Gradually place more weight on such questions

Information Sources about SCL

- Every system should keep a knowledge base of experiences
 - Do not want to invent something 5,000 times
- Some educational systems in the U. S. & Europe have years of experience with Student-Centered learning
- Great deal of information & experiences available on the internet

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What Administrators can do to Help Teachers move toward Student-Centered Learning

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Oregon State University
Professor Emeritus

The Administrator's Job

- Often cannot control compensation
- Cannot change organization's structure
- Do not have much impact on culture
- Power and influence are limited
- In fact, they have few choices

- How can they help in the changeover?

The Administrator's Job

■ Demands

- Teachers perform at a minimum level

■ Constraints

- Resource limitations (money)

■ Shape the Teacher's job

- How we shape the teachers' work

Job Design – Traditional way

- Many teachers' jobs are defined narrowly
 - Cost / Ease
 - Training
 - Replacement
 - Training time for replacements
 - More predicable

Job Design – the SCL way

- ✍ Emphasize Skill Variety
- ✍ Encourage Task Identity
- ✍ Promote Interaction Opportunity
- ✍ Provide more Feedback
- ✍ Make Tasks Significant
- ✍ Above all increase Autonomy

Skill Variety

- The degree to which a job requires a variety of activities for teachers to carrying out the job

Task Identity

- The degree to which the job is completed as either an identifiable whole or part

Interaction Opportunity

- Degree to which people can interact with each other while working

Feedback

- Degree to which teachers get direct and frequent information about how well they are doing their jobs





Autonomy

- Degree to which teachers have choices in scheduling & choosing ways to teach

Teachers' Perceptions

- Personal outcomes
- Work outcomes

Personal outcomes

- Motivation to work 
- Satisfaction with teaching job 
- More personal learning 
- School identification 

Work Outcomes

- Quantity 
- Quality 
- Acceptance of change 
- Personnel measures
 - Absenteeism 
 - Turnover 
 - Grievances 

What Administrators can do

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