

Sabbatical Proposal for 2015.2016

Diego Navarro, DMCP Department

Sabbatical Proposal Abstract

Introduction

Since I began teaching at Cabrillo College in 2002, I have made extensive use of experiential and affective pedagogy and curriculum. I have used affective/non-cognitive pedagogies to meet the needs of at-risk students who are sometimes socially, emotionally, academically, or culturally disconnected from education based on their experiences in secondary and/or post-secondary school. Affective/non-cognitive education is about addressing the beliefs, feelings, mindsets, and attitudes of students. When integrated with academic learning, the impact on student academic performance can be significant. Studies have found that affective/non-cognitive education works because it encompasses the experiences of the whole student including their Feelings, Emotions, Hope, Mindsets, Beliefs, Self-Efficacy, Behaviors, Mindfulness, Social Skills, etc. For example, social skill development helps students build community and creates a sense of belonging, one of the key factors that correlates to student success.

Cabrillo College has received this last summer a grant from the Community Foundation of Santa Cruz County to find and enroll in the college more of these types of students. In my year-long sabbatical I would like to understand how these types of students are effectively being served by programs in other colleges and universities using affective approaches. I have received two non-paid year-long (2015-2016) Visiting Scholar appointments, one at the Carnegie Foundation for the Advancement of Teaching at Stanford University, and the other at the University of California, Santa Cruz - Oakes College, the campus' social justice-oriented college. In both appointments I will be given access to the Universities' research libraries/resources, have office space, and a community of scholars to work with.

In addition, I have led a number of Flex Week workshops on affective methods and approaches. I have also created several faculty, staff and administrator multi-day institutes based on materials I have developed. For my sabbatical year I would like to understand how this field (affective & non-cognitive learning) has progressed, develop a new day long workshop to further train Cabrillo faculty on the latest approaches and research, and update the Academy for College Excellence (ACE) curriculum so that it is aligned with the latest research in the field and so that more Cabrillo students can have access to these effective methods and approaches.

Objectives

1. Identify ten programs in colleges and universities that have used affective or non-cognitive pedagogies as a major component of their teaching/learning approach and have evidence of effectiveness.
2. For five of these programs, document the theories on which their interventions are based and curricular tools and exercises used in their programs.
3. Update my knowledge of the current theories and approaches of affective learning by creating an annotated bibliography of ten articles and books that can be used by faculty to better understand this field.
4. Create a one-day all-college flex activity to enhance student and instructor success by helping faculty understand the latest research in affective and non-cognitive learning, and learn at least five new curricular tools and exercises for their classes.
5. Create ten new curricular exercises for DMCP department curriculum kits (DMCP 110, 111 and 112) that incorporate these curricular tools and provide ACE faculty training on how to use them.

Activities

1. Interview five experts in the field of affective learning (e.g., experts like Angela Duckworth, David Yaeger, Carol Dweck, etc.) to identify ten evidence-based college and university programs (e.g., Carnegie Foundation for Advancement of Teaching Productive Persistence program, 3CSN's Habits of Mind program, etc.) that have used affective or non-cognitive pedagogies as a major component of their teaching/learning approach. Select five programs to document. The selection criteria used to determine which college and university programs to further study will include:
 - the level of success of the program from documented evidence,
 - number of students served,
 - percent of at-risk students served,
 - degree of documentation of exercises and tools, and
 - approach to affective programming.
2. Produce a report on each of the five programs, documenting their theoretical basis, curriculum exercises, tools and activities, and unique contributions to the field.
3. Identify, review, organize, and develop an annotated bibliography of ten books and articles that can be used by faculty to better understand this field.
4. Create a one-day all-college flex activity to enhance instructor success with at-risk students who lack a connection with Cabrillo College socially, emotionally, culturally or academically. The workshop will run from 9am to 5pm and consist of affective theory and approaches, the programs studied and the populations they address, and will teach five affective tools and curricular exercises that can be used in the faculty's classroom.
5. Create ten curricular exercises for the ACE curriculum kits which include new affective tools and exercises. The ACE curriculum consists of hundreds of exercises. Each exercise is from 3 to 15 pages in length detailing the steps required for facilitating an exercise which can last from 30 to 90 minutes.

Benefits to the College

1. Cabrillo students will benefit from faculty who have been trained in proven affective methods and curriculum approaches. Studies have shown that these approaches help to increase student persistence.
2. The DMCP department will benefit from having updated curriculum that utilizes the latest theories and practices in affective learning.
3. Cabrillo faculty will benefit from having access to affective tools and a better understanding of the latest research that addresses the needs of at-risk students.
4. Cabrillo College will increase completion outcomes by meeting the needs of at-risk students using proven and effective curricular and pedagogical methods.

Outcomes to be Submitted

1. **Summary report** documenting five interviews with experts in the field of affective learning and a **report** on five evidence-based college and university programs that have used affective or non-cognitive pedagogies as a major component of their teaching/learning approach. The report will not only include the theoretical basis of their work but actual exercises and tools that can be used in the classroom. These exercises and tools will become the basis of the faculty development workshop and add to the ACE curriculum described below.
2. **Annotated bibliography** of ten articles and/or books that can be used by faculty to better understand this field.
3. **Provide a one day all-college flex activity** to enhance instructor success with at-risk students who lack a connection with Cabrillo College socially, emotionally, culturally or academically.
4. **Create ten new ACE curriculum exercises** that includes new tools and exercises, adding to the over 100 exercises currently in the ACE curriculum.

Date: Oct. 26, 2014
To: Sabbatical Leave Review Board
From: Diego Navarro, DMCP Department

A Professional Development/Sabbatical Leave Proposal

Introduction

In the spring of 2002 I was hired by Cabrillo College's past VP of Instruction as a consultant to research and develop a program to meet the needs of disconnected young adults in Watsonville, CA. This project was sponsored by the City Manager of Watsonville and the head of the County's Human Resource Agency. After performing over one year of pilot-based research, which became the core curriculum in the Foundation Course, I, along with four other Cabrillo College faculty (Sue Nerton, Marcy Alancraig, Deborah Shulman, and Regina DeCosse) created a semester-long bridge program: the Digital Bridge Academy (now called the Academy for College Excellence (ACE)).

In the Fall of 2003, Cabrillo College enrolled the first cohort of students in ACE. I chose Cabrillo College as the incubator for this endeavor because of its long history of supporting initiatives that work to improve student access and academic competency, e.g., Achieve, MESA, CAP, Puente, Summer Migrant Program, etc. Starting the fall of 2005, I was hired as a full-time faculty in the newly created Digital Management Career Preparation Department to teach the ACE Foundation Course, Team Self-Management, Social Justice Research Methods, and Field Work Courses.

Since I began teaching at Cabrillo College I have made extensive use of experiential and affective pedagogy and curriculum. I've used these methods to meet the needs of at-risk students who are sometimes socially, emotionally, academically, or culturally disconnected from education based on their experiences in secondary and/or post-secondary school. When I first developed the ACE curricular exercises there was very little being published about programs on college campuses using affective methods. My career in the high-tech industry had shown me the value and importance of experiential pedagogy. Commonly used in executive education and professional development, experiential exercises are crucial for effective skill building. I felt our students could benefit from this approach. In the last five years, however, much has changed in the affective learning field and affective methods and approaches are now being employed differently in college environments.

The growth of research and publishing in the last few years on these methods has been astounding. Researchers such as Carol Dweck, Angela Duckworth, and David Yaeger have published peer reviewed articles on the efficacy of affective/non-cognitive interventions. Affective/non-cognitive education is about addressing the beliefs, feelings, mindsets, and attitudes of students. When integrated with academic learning, the impact on student academic performance can be significant. Studies have found that affective/non-cognitive education works because it encompasses the experiences of the whole student including their Feelings, Emotions, Hope, Mindsets, Beliefs, Self-Efficacy, Behaviors, Mindfulness, Social Skills, etc. For example, social skill development helps students build community and creates a sense of belonging, one of the key constructs that correlates to student success. Mindfulness exercises have been shown to be effective in developing executive function development in the pre-frontal lobe of the brain.¹ Carnegie Foundation for the Advancement of Teaching has developed non-cognitive/affective tools that predict the success rate of students in their math courses. The research is clear: affective/non-cognitive approaches effectively improve student success, particularly with students who are socially, emotionally, academically, or cultural disconnected from education.

¹ A finding from a number of medical schools conducting research on this topic, including UCLA (see UCLA School of Medicine clinical professor Daniel Siegel's *The Mindful Brain*, 2007).

Cabrillo College faces a need to better equip its faculty to successfully serve at-risk students. This summer (2014), The Community Foundation of Santa Cruz County awarded Cabrillo College with a two-year grant that will increase the number of at-risk students enrolled at the college. The initiative will find and enroll young adult students who are commonly disconnected from education and help build an enrollment pathway from the County's social service agencies to the college. Another initiative, the development of the college's student equity plan, will increase access for students who traditionally wouldn't attend college and are most likely more at-risk. Given the effectiveness of affective/non-cognitive approaches in meeting the needs of at-risk students, professional development in these areas will play a necessary part in helping Cabrillo faculty address and serve these students.

I propose a year-long sabbatical for the 2015-16 academic year in which I would:

- study how other college and university programs are implementing affective and non-cognitive pedagogies and learn how these programs effectively serve at-risk students;
- research current affective learning theories and approaches to bring my understanding of the field up-to-date;
- develop a new day-long workshop to further train Cabrillo College faculty on the latest affective approaches and research; and
- update the ACE curriculum so that more Cabrillo College students have access to new and effective methods and approaches.

I have received two non-paid year-long (2015-2016) Visiting Scholar appointments, one at the Carnegie Foundation for the Advancement of Teaching at Stanford University and the other at the University of California, Santa Cruz - Oakes College, the campus' social justice-oriented college. In both appointments I will be given access to the Universities' research libraries/resources, have office space, and a community of scholars to work with (see Appendix A for the letters from Carnegie Foundation for the Advancement of Teaching and UCSC).

The **purposes** of the leave are:

- (b) improvement of skills in the discipline being taught;
- (d) improvement of teaching skills; and
- (e) development of programs and curriculum.

The **categories** of the leave are:

- (b) a special project or research problem planned with specific objectives;
- (e) curriculum planning and development; and
- (f) combinations of the above.

The proposed project relates to my teaching assignment and to the college mission ("Cabrillo College is a [...] responsive educational community dedicated to helping all students achieve their academic, career, and personal development goals.").

By upgrading the ACE program's methods and curricular tools and supporting the professional development of Cabrillo's faculty through workshop development, my sabbatical project will help Cabrillo become more effective in meeting the needs of students who are disconnected from education.

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2. For five of these programs, document the theories on which their interventions are based and curricular tools and exercises used in their programs.
3. Update my knowledge of the current theories and approaches of affective learning by creating an annotated bibliography of ten articles and books that can be used by faculty to better understand this field.

4. Create a one-day all-college flex activity to enhance student and instructor success by helping faculty understand the latest research in affective and non-cognitive learning, and learn at least five new curricular tools and exercises for their classes.
5. Create ten new curricular exercises for DMCP department curriculum kits (DMCP 110, 111 and 112) that incorporate these curricular tools and provide ACE faculty training on how to use them.

Activities

1. Interview five experts in the field of affective learning (e.g., experts like Angela Duckworth, David Yaeger, Carol Dweck, etc.) to identify ten evidence-based college and university programs (e.g., Carnegie Foundation for Advancement of Teaching Productive Persistence program, 3CSN's Habits of Mind program, etc.) that have used affective or non-cognitive pedagogies as a major component of their teaching/learning approach. Select five programs to document. The selection criteria used to determine which college and university programs to further study will include:
 - the level of success of the program from documented evidence,
 - number of students served,
 - percent of at-risk students served,
 - degree of documentation of exercises and tools, and
 - approach to affective programming.
2. Produce a report on each of the five programs, documenting their theoretical basis, curriculum exercises, tools and activities, and unique contributions to the field.
3. Identify, review, organize, and develop an annotated bibliography of ten books and articles that can be used by faculty to better understand this field.
4. Create a one-day all-college flex activity to enhance instructor success with at-risk students who lack a connection with Cabrillo College socially, emotionally, culturally or academically. The workshop will run from 9am to 5pm and consist of affective theory and approaches, the programs studied and the populations they address, and will teach five affective tools and curricular exercises that can be used in the faculty's classroom.
5. Create ten curricular exercises for the ACE curriculum kits which include new affective tools and exercises. The ACE curriculum consists of hundreds of exercises. Each exercise is from 3 to 15 pages in length detailing the steps required for facilitating an exercise which can last from 30 to 90 minutes.

Benefits to the College

1. Cabrillo students will benefit from faculty who have been trained in proven affective methods and curriculum approaches. Studies have shown that these approaches help to increase student persistence.
2. The DMCP department will benefit from having updated curriculum that utilizes the latest theories and practices in affective learning.
3. Cabrillo faculty will benefit from having access to affective tools and a better understanding of the latest research that addresses the needs of at-risk students.
4. Cabrillo College will increase completion outcomes by meeting the needs of at-risk students using proven and effective curricular and pedagogical methods.

Outcomes to be Submitted

1. **Summary report** documenting five interviews with experts in the field of affective learning and a **report** documenting five evidence-based college and university programs that have used affective or non-cognitive pedagogies as a major component of their teaching/learning approach (see Appendix B for a list of preliminary experts and programs, see Appendix C for sample protocol for interviews). The report will not only include the theoretical basis of their work but actual exercises and tools that can be used in the classroom. These exercises and tools will become the basis of the faculty development workshop and add to the ACE curriculum described below.
2. **Annotated bibliography** of ten articles and/or books that can be used by faculty to better understand this field (see Appendix D for initial bibliography).

3. **Provide a one day all-college flex activity** to enhance instructor success with at-risk students who lack a connection with Cabrillo College socially, emotionally, culturally or academically.
4. **Create ten new ACE curriculum exercises** that includes new tools and exercises, adding to the over 100 exercises currently in the ACE curriculum (see Appendix E for a lesson plan example).

Appendix A
Letter of Appointment as Visiting Scholar at
Carnegie Foundation for the Advancement of Teaching at Stanford University



24 October, 2014

Mr. Diego James Navarro
Director, Academy for College Excellence
Cabrillo College
6500 Soquel Road
Aptos, CA 95003

Dear Diego,

I am delighted to invite you to consider an appointment as a Visiting Scholar at the Carnegie Foundation for the Advancement of Teaching beginning September 2015. Your experience in the field of student support at community colleges as well as your interest in bringing the principles of Networked Improvement Communities to your current work make you a scholar we'd be honored to have join our community at the Foundation.

The Visiting Scholar title was created for leaders in the education field seeking a working relationship and in-house residence at the Carnegie Foundation. This position is an annual appointment, subject to renewal. From year to year, our space considerations may limit our ability to host a Visiting Scholar. Although the Visiting Scholar's work and funding will be independent of Carnegie's, there are three criteria that define the relationship between Carnegie and the Visiting Scholar:

- First, the relationship between the Foundation and its Visiting Scholars is defined by a shared interest in the Carnegie mission and, therefore, should be guided by a shared commitment to advance this common cause. Visiting Scholars' work closely aligns with our mission and values.
- Second, Visiting Scholars are expected to participate in the intellectual life of the Foundation. In the spirit of advancing the field of improvement in education, Visiting Scholars are expected to share their own work, both formally (e.g., presenting in Community Education Lunches [CELs]), informally, and as advisors to program staff as appropriate. In addition, when needed, we may request that the Visiting Scholar offer their expertise to particular projects or programs of the Carnegie Foundation, including participating in occasional convenings to further our learning and that of the field. We also hope that Visiting Scholars will be a part of our community by attending our Monday CELs, social events, and any other staff-wide events, to the extent possible.

51 Vista Lane, Stanford, California 94305
650-566-5100
www.carnegiefoundation.org

Appendix A (continued)

Letter of Appointment as Visiting Scholar at Carnegie Foundation for the Advancement of Teaching at Stanford University



Carnegie Foundation
for the Advancement of Teaching

- Third, Carnegie will seek to be a supportive environment for the work of the Visiting Scholar by providing office space, meeting their technology connectivity needs, and welcoming their participation in our intellectual community. We anticipate that some Visiting Scholars will require modest administrative assistance (travel arrangements, reimbursements, etc.). The Foundation staff can supply this assistance if needed, but with funding for this work coming from the Visiting Scholar's resources.

Again, we are delighted to welcome you to the Foundation and look forward to your arrival.

Very truly yours,

Anthony S. Bryk, President

51 Vista Lane, Stanford, California 94305
650-566-5100
www.carnegiefoundation.org

Appendix A (continued)
Letter of Appointment as Visiting Scholar at
University of California, Santa Cruz

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

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SANTA BARBARA • SANTA CRUZ

OFFICE OF THE VICE PROVOST AND
DEAN OF UNDERGRADUATE EDUCATION

Chancellor's Office, 1156 High Street, Santa Cruz, CA 95064
Phone (831) 459-1993 • FAX (831) 459-2760

October 7, 2014

Diego James Navarro
410 Linden Street
Santa Cruz, CA 95062

Dear Professor Navarro:

RE: Appointment as Visiting Scholar - AY 2015-16

Acting on the recommendation of Oakes College Provost Regina Langhout, I am pleased to offer you an appointment as a Visiting Scholar for the period July 1, 2015 through June 30, 2016. This appointment is without salary, and coincides with your planned sabbatical from Cabrillo College. Please refer to Campus Academic Personnel Manual ([CAPM 609.430](#)) regarding appointment under this policy. As outlined therein, you will need to provide evidence, appropriate to the duration of the appointment, of adequate support from external sources and of health insurance.

I am delighted with your interest in collaborating with Oakes College, and UC Santa Cruz in general, on the study of current and future non-cognitive support programs and how they help students achieve their academic goals. I am also delighted by this opportunity to further expand the many connections between Cabrillo College and UC Santa Cruz.

Library access will be available to you. Please present a copy of this offer letter at either the McHenry or Science Library Circulation desk. Patron borrowing categories and privileges can be viewed at <http://guides.library.ucsc.edu/borrowing/patroncategories>. Additionally, the Division of Undergraduate Education will secure an office at Oakes College for your use during your appointment.

As you are new to UC Santa Cruz, or do not have a current appointment, you are required to complete employment forms. A representative, from the Academic Personnel Office, will be contacting you regarding arrangements and timeline for completing the required forms. In the interim, please contact Daria Troxell (dtroxell@ucsc.edu, 459-2351) if you have questions or concerns.

We look forward to having you involved at Oakes College!

Sincerely,

A handwritten signature in blue ink, appearing to read "Richard Hughey".

Richard Hughey
Vice Provost and Dean
of Undergraduate Education

cc: CP/EVC Galloway
Provost Langhout
Assistant Dean Coddling
Analyst Furber

Appendix B

Preliminary List of Experts to Interview and College & University Programs to Study

Experts in Affective Methods / Approaches and Non-Cognitive Pedagogies:

Angela Duckworth's GRIT methodologies, University of Pennsylvania; community college programs that incorporate GRIT

Carol Dweck's Growth Mindsets methodologies, Stanford University; community college programs that incorporate Growth Mindsets

David Yeager's Messaging methodologies, University of Texas, Austin; community college programs that incorporate Messaging

Programs to Study:

California Community College's 3CSN Network's "Habits of Mind" approach

Carnegie Foundation for Advancement of Teaching "Productive Persistence" program

Appendix C

Sample Interview Questions

Experts in the field of Affective Learning and Non-Cognitive Pedagogies (e.g., Angela Duckworth’s GRIT, Carol Dwyck’s Mindsets, etc.):

- What are the most effective affective methods being used with adult learners, e.g., GRIT, Growth Mindsets, etc.?
- What populations are best served by the various methods?
- What issues are these various methods addressing?
- What are their theories of change?
- What studies have been published that substantiate the affective approach and theory?
- What affective measurement instruments do they use to study their affective theories and approaches?
- What is the predictive value of these measurement instruments?
- What college programs incorporate these theories and approaches effectively? Do they merge more than one method/approach?

College Programs (e.g., Carnegie Foundation for Advancement of Teaching “Productive Persistence” program, 3CSN Network’s “Habits of Mind” approach, etc.):

- What college programs are incorporating affective methods?
 - What is the goal of the programs?
 - Which students do they target?
 - How have the program been rigorously evaluated? Obtain copies of the studies.
 - Which are successful in meeting their intended goals?
 - What affective theories and approaches are incorporated into the program?
 - What curricular exercises are used? What pedagogical tools are used?
 - What are the theories being utilized in their program?
 - Has the program used any affective measurement tools to determine the effectiveness of their affective methods?

Appendix D

Partial Bibliography of Articles and/or Books on Affective Theory²

Barkley, Elizabeth F. (2010). Student Engagement Techniques: A Handbook for College Faculty. San Francisco: Jossey-Bass.

Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). "Grit: Perseverance and Passion for Long-Term Goals." Journal of Personality and Social Psychology, – 92(6), pp. 1087-1101.

Duckworth, A. L. & Seligman, M. E. P. (2005). Self-Discipline Outdoes IQ Predicting Academic Performance in Adolescents." Psychological Science, 16, pp. 939-944.

Farrington, Camille A., Roderick, M., Allensworth, E. et.al, (2012). "Teaching Adolescents to Become Learners: The Role of Noncognitive Factors in Shaping School Performance – a Critical Literature Review." Chicago: CCSR.

Heckman, James J. (2006). "Skill Formation and the Economics of Investing in Disadvantaged Children." Science, 312, pp. 1900 – 1902.

Schmitt, N, Billington, A., Keeney, J., Reeder, M., Pleskac, T., Sinha, R., & Zorzie, M. (2011). "Development and Validation of Measures of Noncognitive College Student Potential." College Board.

Yeager, David S., Walton, Gregory M. (2011). "Social-Psychological Interventions in Education: They're Not Magic." Review Of Educational Research, 81: 267.

² This preliminary bibliography reflects titles that should be viewed as samples. Some texts may be replaced by works that are more relevant as the project develops. It will be expanded to include at least 10 entries.

LESSON PLAN: DAY TWO

Day Two: Working Styles and Education

Exercise	Title	Time	Clock	Handouts & Notes
	Set Up	60 min	8:00a to 9:00a	Use (only) Bold Titles on Agenda flipchart
	Take Roll, Silence & Announcements	10 min	9:00a to 9:10a	
01211	Reflections, Review Day 2 Agenda	30 min	9:10a to 9:40a	
01163	Video Discussion Master (Stand & Deliver)	45 min	9:40a to 10:25a	01162h1 EIF Matrix
	Break	10 min	10:25a to 10:35a	
	Take Roll, Silence & Whip Around: "Something I like about myself is..."	5 min	10:35a to 10:40a	
01230	The Industrialization of Education – Part I	50 min	10:40a to 11:30a	01230h1 Gifts and Talents
01231	Light & Lively: "Count to Ten"	10 min	11:30a to 11:40a	
01230	The Industrialization of Education - Part II	20 min	11:40a to 12n	
	Lunch	60 min	12n to 1p	
	Take Roll, Silence & Whip Around: "Hobbies/Things I like to do when I'm not in school"	5 min	1p to 1:05p	
01250	Sharing School Experiences	30 min	1:05p to 1:35p	Optional: 01240h1: Speaker Interview Inst. 01240h2 Speaker Working Styles Matrix
01245	Light & Lively: "Pass the Electrical Pulse"	15 min	1:35p to 1:50p	
01260	Art Project	60 min	1:50p to 2:50p	
	Break	15 min	2:50p to 3:05p	
	Take Roll, Silence & Whip: "One Place I'd like to travel is..."	5 min	3:05p to 3:10p	
01240	Interviews: Understanding Working Styles	20 min	3:10p to 3:30p	01240h1 Speaker Interview Inst. 01240h2 Speaker Working Styles
01270	Guest Speaker	50 min	3:30p to 4:20p	
01315	Homework: Introduce EIFs, Likert Evaluations	20 min	4:20p to 4:40p	01280h1 Likert by Student 01280h2 Likert by S/O 01280h3 Likert by Family 01280h5 Energy Intensity Flows
01171	Review the Day	20 min	4:40 to 5p	

Appendix E

Sample Lesson Plan from Day 2 of the DMCP 110 Course (Foundation Course).
Each numbered exercise is documented. An example of #01230 is in Appendix E.

Appendix E (continued)

Day 2 of DMCP 110 Course Exercise #01230 The Industrialization of Education
(2 pages out of a 14 page exercise)

#01230 The Industrialization of Education

– *What Schools Have Been and Can Become* –

Total time: 70-85 minutes, or 40 min if Writing Sprints are not included

- #01230A “Your Experiences of Learning” 20 minutes
- #01230B “Schools and the Industrial Revolution” 20 minutes
- #01231 “Light and Lively Count to Ten” 5-10 minutes
- #01230C Writing Sprints 30-45 minutes

Prep ahead:

Instructional Materials

- Day 2 Power Point Set
- 01230.t1: What I had that helped me learn
- 01230.t2: What I needed to help me learn
- 01230h1: Writing Sprint Questions: Education for Talents & Gifts

Equipment and Supplies

Computer running MS Power point, projector and screen.

Room Setting

- #01230A “Your Experiences of Learning” chairs in $\frac{3}{4}$ circle facing front
- #01230B “Schools and the Industrial Revolution” chairs in $\frac{3}{4}$ circle facing front
- #01230C Writing Sprints chairs facing each other in clusters of 3, then chairs in $\frac{3}{4}$ circle facing front

Overview and purpose:

This unit allows students to reflect on their own experiences with formal education, provides them with insights into the history and shortcomings of traditional schooling, and describes an alternative perspective on learning and mastery. It includes a brainstorm about their needs and experiences in school, a lecture on the effect of the Industrial Revolution on educational models with a comparison to Bloom’s Taxonomy of Learning, and writing sprints about relating education to talents and gifts.

The purpose of this unit is to help students:

- a. Understand that their previous struggles with school may have come from the failures of the school system (rather than their own inadequacies)
- b. Begin to appreciate their own abilities and desire to learn.

01230 The Industrialization of Education-20130501.1.doc
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Appendix E (continued)

Day 2 Exercise #01230 The Industrialization of Education

#01230 The Industrialization of Education

Student Learning Outcomes

- An understanding of the history and shortcomings of traditional schooling
- An understanding of Bloom's Taxonomy and the different levels of learning
- An appreciation for their own needs as learners and how they can be met
- Reflective writing practice
- Reflective conversation practice

Prerequisites/Dependency

Prerequisites:

- #01110 WYSIWYG What You See Is What You Get
- #01120 Introductions: It's Your Choice
- #01130 Building a Learning Community

Post-requisite: #01260 Art Project – What was your experience of school?


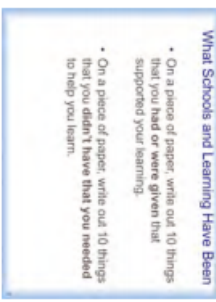
Recommended to follow this exercise: #01360 Hero's Journey

Background

Sources

Bloom's Taxonomy: http://projects.coe.uga.edu/eplt/index.php?title=Bloom%27s_Taxonomy
Ellwood Patterson Cubberley: http://en.wikipedia.org/wiki/Ellwood_Patterson_Cubberley
Lewis Terman: http://en.wikipedia.org/wiki/Lewis_Terman
John Dewey: http://en.wikipedia.org/wiki/John_Dewey

#01230 The Industrialization of Education

Topic & Times	Instructor Notes: #01230 <i>The Industrialization of Education</i>	Thumbnails of handouts & flip charts
Set Up / Introduction	Assemble prior to exercise: <ul style="list-style-type: none"> flip chart 01230.11 What I had that helped me learn flip chart 01230.12 What I needed to help me learn Instructors review material from Sources as needed.	
Instructions 01230A Your Experiences of Learning (20 min.)	Instruction: <ul style="list-style-type: none"> Ask (rhetorical): What did you need for learning? Begin this brainstorm by telling a story about the things you needed to help your learning. <ul style="list-style-type: none"> Example: A student needed a place to study because he couldn't study at home. He got help from a buddy to get to the library to do his homework after class. Brainstorm the ideas without writing them down. Advance Slide: What Schools and Learning Have Been Instruction: <ul style="list-style-type: none"> Say: Take out a piece of paper and writing utensil and write down 10 things for learning that you were <u>GIVEN/HAD</u>. Include things from your classroom environment, from your teacher and other students, materials, supplies, place(s) to do homework, supportive parents, mentors etc. Allow 3-5 minutes to complete. Say: Write down 10 things for learning that you <u>DIDN'T</u> have. What are some examples of things you needed but did not have? Include things from your classroom environment, from your teacher and other students, materials, supplies, place to do homework, supportive parents, mentors etc. Allow 3-5 minutes to complete. 	

Appendix E (continued)

Day 2 Exercise #01230 The Industrialization of Education

#01230 The Industrialization of Education


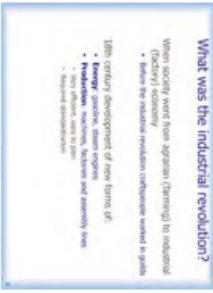
Topic & Times	Instructor Notes: #01230 <i>The Industrialization of Education</i>	Thumbnails of handouts & flip charts
	<p>Instruction:</p> <ul style="list-style-type: none"> • Brainstorm with students what they did have for learning and transcribe onto the flip chart. • Brainstorm with students what they didn't have for learning and transcribe onto the flip chart. • Put completed flip charts up on wall. <i>(take digital photos before removing/recycling at the end of class.)</i> 	<p>01230.11: What I had that helped me learn What I had that helped me learn</p> <p>01230.12: What I needed to help me learn What I needed to help me learn</p>
	<p>Transition - Say:</p> <p>We are going to learn about the antecedents to our school system - the history of the development of our system. There is a system behind it all that we need to understand. We didn't have the things we needed (indicate the posters on the wall), and because we are too smart for the system, we didn't fit it. It's not that we aren't smart, it's that we've had things happen to us that affected our school experiences. Our circumstances have a lot to do with why we didn't succeed before – but this program is going to change that. It's your choice to keep going the way you always have, or you have the choice to change.</p> <p>Anecdote from one ACE Instructor: "I taught one ACE student, who would put his backpack down and leave, every time he went home. His parents didn't want him around because they thought he was a "bad influence" on his younger siblings. He</p>	

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Appendix E (continued)

Day 2 Exercise #01230 The Industrialization of Education

#01230 The Industrialization of Education

Topic & Times	Instructor Notes: #01230 <i>The Industrialization of Education</i>	Thumbnails of handouts & flip charts
01230B Schools and the Industrial Revolution (20 min.)	<p>changed his behavior: he linked up with other students to go to his college's Learning Center to work together on homework. He didn't change his pattern by waiting for his parents to treat him differently; his cohort supported him to come up with a different plan of action."</p> <p><i>Instructor's Notes:</i></p> <ul style="list-style-type: none"> Follow the <i>Power Points</i> for this part of the exercise. The text from those slides is reproduced below for your reference. <p><i>The goals of this lecture include:</i></p> <ul style="list-style-type: none"> Offer an explanation of why our school experience was what it was. Offer the idea that school experiences can be personally rewarding. <p>Show the "Schools and the Industrial Revolution" power point slide.</p> <p>Say: It is important to understand where schools came from and how they were developed.</p>	
	<p>WHAT IS THE INDUSTRIAL REVOLUTION?</p> <p>Ask: Does anyone have an idea of what the Industrial Revolution was?</p> <ul style="list-style-type: none"> When society went from agrarian (farming) to industrial (factory) economy <p>Ask: What does agrarian mean?</p> <ul style="list-style-type: none"> Before the Industrial Revolution, craftspeople worked in guilds – they were specialists in making and building. Guilds were often based on family relationships. They included such trades as masons, tailors, thatchers, etc. Society was based on tradition, emotion, personal relations Something happened in the 1700's to 1800's – development of new forms of energy (gasoline, steam engines) Making textiles/clothing using machines <p>In the 1920s, emphasis was placed on rationality, focusing on efficiency, calculability, and predictability.</p> <ul style="list-style-type: none"> Assembly lines created at Ford Motor Company: each worker only does one piece. <ul style="list-style-type: none"> Very efficient, easy to plan (20 cars in 5 days). 	

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Appendix E (continued)

Day 2 Exercise #01230 The Industrialization of Education

#01230 The Industrialization of Education

Topic & Times	Instructor Notes: #01230 <i>The Industrialization of Education</i>	Thumbnails of handouts & flip charts																
	<ul style="list-style-type: none">◦ Required standardization – always do it exactly the same<ul style="list-style-type: none">▪ What if a car had one wheel at 13 inches another at 14 inches and two at 16 inches?...the car wouldn't work so well.▪ For example, in an automobile assembly line one person puts on the back tire, another a door, another the steering wheel, etc.																	
	<p>Economic Restructuring</p> <p>Review the slide: Points to make:</p> <ul style="list-style-type: none">• As you can see, farming and manufacturing have decreased in terms of the number of people in the U.S. working in these areas.• Farming employment went down because of the use of technology including farming equipment and the application of pesticides and fertilizers. These approaches allowed farming to become more predictable.• Manufacturing employment has decreased because of the policy of globalization where you "off-shore" work that can be done by laborers in countries with a lower cost of living and therefore lower wages. <p>Ask: What are service industry jobs?</p> <ul style="list-style-type: none">• Service-sector jobs have two levels of employment with associated wages and benefits:<ul style="list-style-type: none">◦ <u>Low-wage service sector jobs</u>, i.e. fast food, hospitality (i.e. cleaning rooms in hotels, hotel clerks, entertainment venues (i.e. amusement parks, bowling alleys, movie theaters, coffee houses, etc.). No health benefits; part-time, easily replaceable workforce◦ <u>Professional career service employment</u>: lawyer, doctor, social worker, teacher, manager, public health official, government worker, etc. Career path, certification, and associated benefits <p>Ask: What do you think will be the future trend? Is farming going to go up? What about manufacturing? You need to learn the skill sets if you want to get the higher wage service jobs. All those jobs require college level education. This is the trend. Schools were designed in the early 1900s, and may not be teaching the skills you need today.</p>	<p>Economic Restructuring</p> <table><tr><th></th><th>1950</th><th>1980</th><th>2010</th></tr><tr><td>farming</td><td>30%</td><td>2%</td><td>2%</td></tr><tr><td>manufacturing</td><td>40%</td><td>40%</td><td>22%</td></tr><tr><td>service</td><td>30%</td><td>58%</td><td>76%</td></tr></table>		1950	1980	2010	farming	30%	2%	2%	manufacturing	40%	40%	22%	service	30%	58%	76%
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Appendix E (continued)

Day 2 Exercise #01230 The Industrialization of Education

#01230 The Industrialization of Education


Topic & Times	Instructor Notes: #01230 <i>The Industrialization of Education</i>	Thumbnails of handouts & flip charts
	Social Conditions Leading the Debate—how schools fit into the industrial framework <ul style="list-style-type: none"> Need to link industry's needs for trained workers with the design of public schools At the same time, industrial employers needed immigrants socialized with the work habits and attitudes required to "fit in" as factory workers (proper deportment, punctuality, willingness to be supervised and managed) and with technical skills. So, these needs of industry coincided with the curricular vacuum as public schools grew in urban areas. Public schools taught children to adapt to the requirements of industry. <ul style="list-style-type: none"> Foreigners came from Europe, and spoke many different languages. Factories needed workers. Curriculum was designed to focus on these needs (teach English to all, Americanize foreigners, produce workers for factories, etc). 	<p>Thumbnail of a handout titled "Social Conditions Leading the Debate". The text on the handout includes:</p> <ul style="list-style-type: none"> Needs of industry in the early 1900s: <ul style="list-style-type: none"> • Urban factories being sweated • New English speaking immigrants in urban centers • Factory environment required • Immigrants needed to work according to time • Workers to show up and do the work Need to link industry's needs for trained workers with the design of public schools
	Industry Requirements for Public Schools in the Early 1900's <ul style="list-style-type: none"> Industry required students who could: <ul style="list-style-type: none"> Memorize tasks Follow orders Show up on time Be dependable 	<p>Thumbnail of a handout titled "Industry Requirements for Public Schools in Early 1900s". The text on the handout includes:</p> <p>Students who can:</p> <ul style="list-style-type: none"> Memorize tasks Follow orders Show up on time Be dependable What else?
Effects of Industrial Revolution on Education (1)	Standardization has been applied to teaching. Education is dominated by scheduling. <ul style="list-style-type: none"> Students are taught not to ask questions because it will throw off the timing of classes. There is no time to catch students up if they don't 'get it'. Since it is easier to grade multiple-choice tests and stay on track while using lecture methods to teach, we have accepted standardized curriculum. Teaching is designed to fit to standardized tests (happening now). <ul style="list-style-type: none"> We employ flawed tests to rank our children: 	<p>Thumbnail of a handout titled "Effects of Industrial Revolution on Education". The text on the handout includes:</p> <p>Education dominated by scheduling:</p> <ul style="list-style-type: none"> • Students taught not to ask questions, if they don't get it, they don't get it • Since it is easier to grade multiple-choice tests • Teaching to standardized tests • Tests often have bias, flawed errors

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Appendix E (continued)

Day 2 Exercise #01230 The Industrialization of Education

#01230 The Industrialization of Education

Topic & Times	Instructor Notes: #01230 <i>The Industrialization of Education</i>	Thumbnails of handouts & flip charts
	<ul style="list-style-type: none"> • Example: Tree, bird, car, elephant: A test was given to 5 year olds, and one of the questions was “what flies?” and elephant was one of the answers. The child chose elephant, and as a result was graded poorly on the test. What wasn’t taken into consideration was that a Walt Disney movie had just been released, starting Dumbo the flying elephant. Why should that young student be penalized? • Teachers have been given curriculum to teach; students conformed to curriculum. • Lecture methods attempt to shift visual learners to auditory learners, with other learning styles devalued. • Students sorted <ul style="list-style-type: none"> ◦ By age groups ◦ By “ability” • Testing standards • “Experts” designing textbooks 	
Effects of Industrial Revolution on Education (2)	<p>Focus on weeding out students: “wheat from chaff” judgments and competition</p> <ul style="list-style-type: none"> • Not focused on sharing • Unfortunately teaming is critical skill for careers with a future. Schools were designed to compete with each other, instead of working in teams. • Don’t focus on those who aren’t performing, regardless of reasons/background <p>Emphasize content not process; memorization</p> <ul style="list-style-type: none"> • Not focused on thinking • No learning moments, no time to think things over • Memorizing content in multiple-choice exams • No room for imagination, creativity, thinking <p>Optional additional points: According to the Industrial Model, what should every 5, 13 and 16 year old know?</p> <ul style="list-style-type: none"> • How to do things that don’t have a solid purpose: e.g. memorize the pre-amble to the constitution; remember the 50 states 	 <p>Effects of Industrial Revolution on Education ::</p> <ul style="list-style-type: none"> Focus on weeding out students, judgments, and competition Not focused on sharing Unfortunately teaming is critical skill for careers with a future Schools were designed to compete with each other, instead of working in teams or background Emphasize content not process; memorization Not focused on thinking No learning moments, no time to think things over Memorizing content in multiple-choice exams No room for imagination, creativity, thinking

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Appendix E (continued)

Day 2 Exercise #01230 The Industrialization of Education

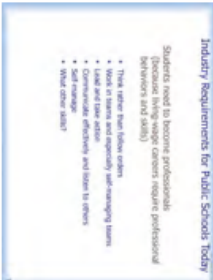
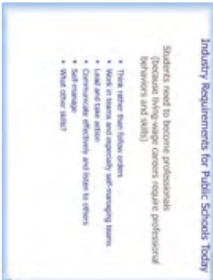

#01230 The Industrialization of Education

Topic & Times	Instructor Notes: #01230 <i>The Industrialization of Education</i>	Thumbnails of handouts & flip charts
	<ul style="list-style-type: none"> To follow directions and learn same thing as every other child at that age at the same time How to take and pass multiple choice tests, assuming that real learning can be gauged this way Never question your teachers Never to finish the textbook—education had no beginning, middle, or end (in a factory you never finish things—you don't choose the work you do; you move around from worksite to worksite) To enforce memorization as a learning tool To become used to maintaining a fixed position for hours; Where does community come into the picture? Where does working in teams come into the education process? Is education about following orders? 	
Effects of Industrial Revolution on Education (3)	<p>Today, schools emphasize analytical styles more than other styles</p> <ul style="list-style-type: none"> Sometimes support concluding skills Interacting is accepted and taught in Kindergarten, then stopped. Synthesizing and interacting are downplayed. <p>Up until 12th grade, a lot of education is propaganda:</p> <ul style="list-style-type: none"> Teaches “one right way” to think, no critical thinking Creates good soldiers Encourages conformity and shared values Creates good “American Citizens” Controls behavior <p>Indoctrinates with the Puritan Work Ethic (came with the Pilgrims): “Work hard, live clean, and you’ll go to Heaven” secularized into the “Horatio Alger” ethic: “Hard work is the path to riches.”</p> <p>These ethics ensure that the poor blame themselves for their poverty (If I’m not rich, it’s my fault because I haven’t been working hard enough.)</p>	

Appendix E (continued)

Day 2 Exercise #01230 The Industrialization of Education




#01230 The Industrialization of Education

Topic & Times	Instructor Notes: #01230 <i>The Industrialization of Education</i>	Thumbnails of handouts & flip charts
Effects of Industrial Revolution on Education (4)	Why do you think education is this way? <ul style="list-style-type: none"> o In the industrial revolution workers were needed who followed orders. o Western technology moved from the Industrial Model to the Information Model with the invention of the first computer. Unfortunately, our educational system is not evolving as quickly; we are still trapped in the Industrial Model. o Consequently, our schools are not preparing us for the needs of the Information Age. o Contrary to the Industrial model, today the careers with a future require the creative use and application of knowledge and information. 	 <p>Industry Requirements for Public Schools Today</p> <p>Students need to become professionals (because living-wage careers require professional behaviors and skills):</p> <ul style="list-style-type: none"> • They enter two follow orders • They work in self-managing teams • Lead and take action • Communicate effectively and listen to others • They are self-managing
Industry Requirements for Public Schools Today	What is different today? <ul style="list-style-type: none"> ▪ Workers need to be professionals (because living-wage careers require professional behaviors and skills): ▪ Think rather than follow orders ▪ Work in self-managing teams ▪ Lead and take action ▪ Listen and communicate effectively ▪ Self-manage 	 <p>Industry Requirements for Public Schools Today</p> <p>Students need to become professionals (because living-wage careers require professional behaviors and skills):</p> <ul style="list-style-type: none"> • They enter two follow orders • They work in self-managing teams • Lead and take action • Communicate effectively and listen to others • They are self-managing
Watch “Did you know?” 5 min	Watch 5 minute YouTube video called “Did You Know?”	 <p>Watch 5 minute YouTube video called “Did You Know?”</p> <p>Link: http://www.youtube.com/watch?v=JmY17m8dKp0</p>

Appendix E (continued)

Day 2 Exercise #01230 The Industrialization of Education

#01230 The Industrialization of Education



Topic & Times	Instructor Notes: #01230 <i>The Industrialization of Education</i>	Thumbnails of handouts & flip charts
Light & Lively: 01231 Count to Ten (Or L&L of choice) (5-10 min)	Room Setting: All Participants in a circle Instructions: <i>Light & Lively: "Count to Ten"</i> Tell the group that in this game they have to count to ten as a group, and that they have to follow certain rules: <ul style="list-style-type: none"> • They cannot go around in a circle, counting in order • They cannot speak to each other another than to call out a number • Only one person can speak at a time • If two or more people speak at once, the group has to start over. • They cannot communicate with each other, even nonverbally, in a way that would indicate order • Usually the counting has to start over several times before the group begins to concentrate intensely. Hints for group that is getting frustrated: don't rush. Don't be afraid to have long pauses between numbers. 	
	What Schools and Learning Should Be	
Alternative Model (1)	Advance Slide: Alternative Model (1) Say: Many of our students have survival skills. We've learned incredible things. But college sometimes scares us, because we think school is so different. But this program teaches you to take your persistence, your survival skills, and apply it to the college setting so that you can persist here. <ul style="list-style-type: none"> ▪ Students have something they are proud of, to share. <ul style="list-style-type: none"> ○ Have the students share with each other ▪ Education designed around developmental timing of the brain 	

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Appendix E (continued)

Day 2 Exercise #01230 The Industrialization of Education


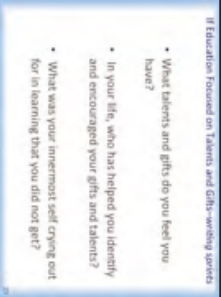
#01230 The Industrialization of Education

Topic & Times	Instructor Notes: #01230 <i>The Industrialization of Education</i>	Thumbnails of handouts & flip charts
	<ul style="list-style-type: none"> o The brain develops through stages o Younger brain is not designed for academics. o Older brain designed for intellectual understanding but not judgment. o Prefrontal lobe does not fully develop until you are 27 or 28. o Brain has seven times more area for visual than auditory. o One of the biggest problems we have is that curriculum us not designed around brain development. 	
Alternative Model (2)	<ul style="list-style-type: none"> ▪ In school you need to become a master <ul style="list-style-type: none"> o A master of your learning o The Academy teaches you how to identify the styles of your teachers. Are you going to have the same style as your teacher? Not necessarily, and if you can identify the styles then you can communicate with them. o You can then manipulate your classrooms for optimal learning. ▪ Grading <ul style="list-style-type: none"> o Grasps concept and idea behind it "C" o Understood and can apply it "B" o Mastered "A" 	 <p>Alternative Model (2)</p> <p>In school you need to become a master</p> <ul style="list-style-type: none"> • A master of your learning • The Academy teaches you how to identify the styles of your teachers. Are you going to have the same style as your teacher? Not necessarily, and if you can identify the styles then you can communicate with them. • You can then manipulate your classrooms for optimal learning <p>Grading</p> <ul style="list-style-type: none"> • Grasps concept and idea behind it "C" • Understood and can apply it "B" • Mastered "A"
Alternative Model - Bloom's Taxonomy	<ul style="list-style-type: none"> ▪ Alternative Model (Bloom's Taxonomy): (define taxonomy: science of naming – talk about cars, biological: might be nice to give more clear example) <ol style="list-style-type: none"> 1. Memory (memorizing – main focus of our educational system). Most basic form of learning is memorization. 2. Understanding (can put it in your own words) 3. Application (can use it) 4. Analysis (critical thinking – can look for ways to improve) 5. Synthesis (putting together ideas – seeing overall order) 6. Evaluation (comparison & explanation: all leading to Mastery) <p>High Cs are good at Memory (#1) and Application (#3)</p> <p>High S & Is need:</p> <ul style="list-style-type: none"> • Understanding (#2) to memorize 	 <p>Alternative Model – Bloom's Taxonomy</p> <p>1870s -> current day language</p> <ol style="list-style-type: none"> 6. Evaluation 5. Synthesis 4. Analysis 3. Application 2. Understanding 1. Memory



Appendix E (continued)

Day 2 Exercise #01230 The Industrialization of Education

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Topic & Times	Instructor Notes: #01230 <i>The Industrialization of Education</i>	Thumbnails of handouts & flip charts
	<ul style="list-style-type: none"> Need to do Synthesis (#5) to do Analysis (#4) <p>High S & I's are good at Understanding (#2) and Synthesis (#5)</p> <p>High A's are good at Analysis (#4)</p> <p>http://projects.coe.uga.edu/epltt/index.php?title=Bloom%27s_Taxonomy</p> <p>"Education is not the filling of a pail, but the lighting of a fire!" -- William Butler Yeats</p> <p>Say: What did you learn about schools? About what you needed and had? Knowing some of these things, does it help you become a better student?</p>	
Introduce Student Writing Sprint (20 min)	<p>If Education Focused on Talents and Gifts writing sprint</p> <p>Advance Slide: If Education Focused on Talents and Gifts</p> <p>Refer to 01230h1 Writing Sprints Education Gifts and Talents in reader.</p> <p>Instruction:</p> <ul style="list-style-type: none"> Using the handout, write out your responses to the following three questions: <ul style="list-style-type: none"> What talents and gifts do you feel you have? Who has been present in your life and reflected your gifts and talents to you? What was your innermost self crying out for in learning that you didn't get? Provide about 15 minutes to complete; check students; progress at 12 minutes. Have students count off to create groups of 3 (for example, if 27 students, have students count off by 9). Distribute the groups to locations around the room. Give students 5 minutes to share what they wrote. Help them recall the method of sharing used in the reflection exercise earlier in the day. 	

Appendix E (continued)
Day 2 Exercise #01230 The Industrialization of Education

#01230 The Industrialization of Education		
Topic & Times	Instructor Notes: #01230 <i>The Industrialization of Education</i>	Thumbnails of handouts & flip charts
Debrief (10 min)	Extended Whip Around “two breaths”: ‘What is profound about what you wrote or saw in the video?’	<div> <div> 01230h1: Writing Sprint Questions on Education for Talents & Gifts </div>  </div> <div> <div> Extended Whip Around “Two breaths” </div>  </div>