February 10, 2003

Professor Carolyn Tuohy
Vice-President, Policy Development
and Associate Provost
Room 206, Simcoe Hall
27 King's College Circle
University of Toronto

Dear Professor Tuohy:

At its meeting of January 28, 2003, the Council of the School of Graduate Studies approved the following motion:

> **THAT** SGS Council approve the proposal for a Collaborative Master's and Ph.D. Program in Developmental Science, effective September 2003.

The motion, proposal, executive summary and memorandum of agreement are attached. The proposal was approved at the January 14, 2003, meeting of the Division IV Executive Committee and at the January 16, 2003, meeting of the Division II Executive Committee.

On behalf of the Council of the School of Graduate Studies, I am presenting this item to Governing Council committees, as appropriate, for information.

Yours sincerely,

Jane Alderdice
Secretary to SGS Council
and Coordinator of Policy, Program and Liaison

Encl.
/smr

c.c. J. Astington U. deBoni. T. Chan J. Cherry
J. Freedman S. Girard C. Johnston V. Makarovska L. Yee

H:Council/FollowUp/2002-2003/Jan 28/Dev. Sc. CP

Motion

School of Graduate Studies Council
Tuesday, January 28, 2003

Item 7.1.

MOTION (/) **THAT** SGS Council approve the proposal for a Collaborative Master's and Ph.D. Program in Developmental Science, effective September 2003.

See the proposal, executive summary and memorandum of agreement attached.

NOTE:
The Division IV Executive Committee at its meeting of January 14, 2003 approved this proposal.

The Division II Executive Committee at its meeting of January 16, 2003 approved this proposal.

With SGS Council's approval this item will go to Governing Council committees for information, and to the Ontario Council on Graduate Studies for a standard appraisal.

UNIVERSITY OF TORONTO

Brief for the Standard Appraisal

of the

Collaborative M.A./Ph.D Program

in

Developmental Science

Submitted to the
Ontario Council on Graduate Studies
February 2003

Executive Summary

The proposed Collaborative Program in Developmental Science would link developmental psychology, developmental neuropsychology, and educational psychology, as well as cognitive science and intervention science as applied to children and their families, to form a coherent program of studies dedicated to research on child development and its applications. This integration will address a major shift within the field toward a cross-disciplinary approach to child development, centered in psychology but encompassing related disciplines as well. A Collaborative Graduate Program is a recognized academic entity at the University of Toronto, and the name "Developmental Science" reflects an accepted nomenclature for the cross-disciplinary study of child development (as exemplified by the journal "Developmental Science" produced by Blackwell Publishers).

Here at the University of Toronto, developmental psychologists are somewhat arbitrarily divided across two departments – the Department of Psychology and the Department of Human Development and Applied Psychology (HDAP). In the last few years, increasing collaborations in teaching, supervision, and research attest to the need for a formal structure to unify our efforts. The CP will provide the opportunity for a coherent curriculum in Developmental Science, based on three required core courses and a menu of jointly offered electives. This curriculum builds on the diverse expertise of the faculty of both departments – together constituting the largest and most renowned body of developmental psychologists in Canada -- to provide a unique developmental program. This program will attract the highest quality students from across Canada and other countries, raising the profile of both departments, and the University, within the developmental community. It will also provide students with highly rigorous training in Developmental Science, through research apprenticeships with the faculty, preparing them for leadership roles in this emerging area. Finally, we expect the CP to extend to collaborations with additional departments over the next few years, including the departments of zoology, linguistics, and computer science.

The Departments of Psychology (Division IV) and Human Development and Applied Psychology (Division II) have been discussing the proposed collaboration for about two years. A recently appointed Canada Research Chair in HDAP (Chris Moore), and two new courses intended to serve as core CP requirements, have been undertaken as steps toward the establishment of the proposed CP. Faculty from both departments, including Lewis, Zelazo, Jenkins, and Grusec, have met together on several occasions to draft the proposal and negotiate the details of the new structure. Both departments have enthusiastically endorsed the proposal at all levels. Resource implications are minimal. Administrative and academic support will be provided by both departments, through the normal activities of staff and faculty. No additional resources will be required other than advertising costs, and we have agreed to share these evenly.

MA students will be required to take two core CP courses: Cognitive development and applications (currently HDP 1233, but will be redesignated), and Social-emotional development and applications (currently HDP 1249, but will be redesignated). PhD students will be required to take an additional course, presently in the proposal stage, entitled Advanced Seminar in the Methods of Developmental Science. Other requirements, for both degree levels, will be those of the department in which the student is enrolled. A list of Developmental Science electives will be available to serve elective slots in both departments, and all CP students will be required to attend a Developmental Science colloquium series. Faculty who will become members of the CP include Grusec, Helwig, Schellenberg, Schmuckler, and Zelazo (from Psychology), and Arnold, Astington, Ferrari, Jenkins, Keating, Lewis, Oatley, Perlman, Peskin, Stanovich, and Moore (from HDAP).

January 17, 2003

PROPOSAL FOR COLLABORATIVE M.A./PH.D. PROGRAM IN DEVELOPMENTAL SCIENCE

Introduction

The study of human development has remained fragmented at the University of Toronto, with basic developmental psychology housed in the Psychology Department and programs in "human development", educational psychology, and psychological intervention and prevention housed in OISE/UT. This fragmentation seems particularly unfortunate to developmentalists in the Department of Human Development and Applied Psychology (HDAP) and the Psychology Department, who see themselves as working toward common goals, share specific research interests, actively collaborate on various research projects, and together comprise one of the largest and most productive groups of developmentalists in North America. The proposed collaborative program would involve the M.A./Ph.D. program in Human Development and Education (within HDAP) and the M.A./Ph.D. program in Psychology, both classified by OCGS as of Good Quality. The collaborative program would allow us to join forces in research, teaching, and theory development, integrate resources for supervision and training, and attract the highest-level graduate students available. This move would also extend naturally from the recent restructuring of the Human Development and Education (HDE) program within HDAP. Starting this year, HDE is implementing an entirely new curriculum at the MA level, beginning with two new foundational courses in cognitive and social-emotional development. These courses were designed to provide a rigorous introduction to the *science* of human development and to serve as anchor points for the anticipated collaboration with the Psychology Department.

This collaboration is particularly timely because it reflects an emerging school of thought in the field at large: a dedication to integrate the scientific understanding of development with the implementation of "real life" benefits for children and families and, in doing so, move the study of human development beyond its conventional disciplinary boundaries. National and international funding agencies now strongly favour multi-disciplinary research proposals in human development, intervention, and education (e.g., Institute for Human Development, Child and Youth Health; National Institutes of Mental Health), and "knowledge transfer" is the latest buzzword used by the Canadian Institutes for Health Research to identify such collaborations. As a result, the emerging field of "developmental science" has become more attractive to scholars and researchers than the limited designations of "developmental psychology" or "human development." The proposed collaborative program in Developmental Science will thus bring together developmental and educational psychology, cognitive science, neuroscience, and treatment and prevention sciences, as a multi-disciplinary foundation for understanding human development and disseminating the benefits of that understanding.

Objectives

The collaborative program is intended to prepare students for research careers in basic and applied developmental science. Research into basic processes will examine the psychological, computational, and biological mechanisms of cognitive and emotional development, social development, personality development, and developmental psychopathology. More applied research will investigate the psychological and biological effects of prevention and intervention techniques in educational, community, and clinical practices. The program will also serve to familiarize faculty and students with each other's

research across a broad span of topics and approaches, broadening the perspective and relevance of our work and leading to new collaborative research proposals. Graduate courses, research collaborations, and colloquia are expected to create a multi-faceted context for training and scholarship, and the new program is expected to attract high-quality graduate students interested in the scientific investigation of human development. These students will receive a unique learning experience that is not presently offered by either department. A critical, rigorous focus on the science of human development, and a rich and fertile research environment in which to apply that focus, require the collaboration of a critical mass of developmentalists committed, as we are, to building an internationally renowned program. We also expect our multi-disciplinary emphasis to lead to collaboration with additional departments over the next few years, including the departments of zoology, linguistics, and computer science.

Admission Requirements

MA and PhD candidates must be accepted by one of the participating departments under SGS general regulations and according to the specific criteria of the department. In addition, students must apply and be admitted to the CP. Normally, a psychology background and a demonstrated interest in developmental psychology will be sufficient grounds for admission. As well, students who wish to be admitted to the CP will apply to work with CP members as their advisors, with the goal of thesis supervision or other research supervision. Students will register in the home department and select a course of study that satisfies the requirements of their departmental program as well as the requirements of the CP. The student's advisor, as a member of the CP, will provide counseling and supervision appropriate to both sets of requirements.

Collaborative Program Requirements

MA requirements. In developing this proposal, it was decided that core courses at each level would be necessary for adequate rigour, but that additional courses should be kept to a minimum so that students could complete their degrees in a timely fashion and retain some freedom in choosing electives. Our solution was to utilize the two new HDE courses, Cognitive Development and Applications (HDP 1233H) and Social-Emotional Development and Applications (HDP 1249H), as required core CP courses for the MA year. As core CP courses, these courses will receive new formal course designations indicating that they are courses in the CP in Developmental Science (e.g., JPD). CP students enrolled in Psychology will now be obligated to take these courses to fulfill their requirements. MA students in HDE have been required to take these courses for one year already, and those in the proposed CP will continue to do so. However, MA students in HDE who are not enrolled in the CP will now take alternative courses to fulfill their program requirements, such that these two courses will be specific to the CP. Note that attending the CP core courses will not increase the number of courses required by each program, but will constrain course selection. Students outside the CP will be allowed to enroll in CP core courses if they wish, as long as they have the psychology and research methods background (or co-requisites) necessary to participate fully. However, CP students will have priority for registration in these courses. The proposed core course structure creates parity for students across both departments, provides a common learning environment for all CP students early in their program, and offers rigorous training in the foundations of developmental science. Moreover, faculty from both departments will be responsible for teaching both courses, based on a rotation among all CP members. Because these are new courses, and their content is not yet

finalized, the compilation of input from faculty from both departments will result in a truly integrative and comprehensive curriculum emerging over the next few years.

PhD requirements. At the doctoral level, one new half-course will serve as the CP core course, filling what would otherwise be an elective slot for students in both departments (see attached course description). This will be a developmental methods seminar held every second week throughout the academic year. Each CP member will be responsible for leading one or two classes per year, focusing on developmental methods of particular relevance to that member's research (e.g., multi-level modeling, time series analysis, child ERP methods, dynamic systems methods), so that teaching obligations will be distributed and will not pull faculty away from existing obligations. One member, rotating each year, will oversee the organizational structure and course requirements. These requirements will consist of one paper relating to methods of interest and one term paper, due at the end of the year, in which students will develop a research program of their own design based on a particular methodology or combination of methods. Students will be encouraged to focus on research directions relevant to their dissertation topics. Grades will be assigned on the basis of conceptual and technical comprehension, coherence of thinking, clarity of presentation, and application of sound methodological and design principles to research topics. Any students entering the CP at the doctoral level will be required to make up the two core M.A. courses unless they have already taken courses with equivalent content.

Other requirements. Finally, a developmental science colloquium series will provide monthly presentations from local and visiting scholars, encouraging further discourse and cohesion among students and faculty. This series will overlap with the occasional Applied Cognitive Science colloquia housed in HDAP and the Psychology Department colloquium series. Topics that are central to Developmental Science will be flagged for the new series and

attendance by all CP students will be mandatory. No evaluation will be conducted, but students will be expected to be conversant with the topics presented.

Program Administration

A program committee of two members from each unit will direct the management of the program. The committee will be headed by the Collaborative Program Director, and this post will alternate between the two departments every three years. The Director's appointment shall be approved by the Dean of the School of Graduate Studies on the recommendation of the Program Committee after consultation with the Chairs of the participating graduate units. The Director and Program Committee will be responsible for approving admissions to the CP and overseeing the completion of all CP requirements. They will also be responsible for ensuring the CP designation on the final transcript.

Contributions of Participating Units

The collaborative program will include developmentalists from the Department of Psychology and the Department of Human Development and Applied Psychology (program in Human Development and Education). Five faculty members from the Department of Psychology (Grusec, Helwig, Schellenberg, Schmuckler, Zelazo) will be members of the CP. Within HDAP, the faculty primarily affiliated with the HDE program (Arnold, Astington, Ferrari, Jenkins, Keating, Lewis, Oatley, Perlman, Peskin, Stanovich) will be members, and so will Chris Moore, a new faculty member with a CRC appointment that includes generous funding for labs Core faculty members' research interests and relevant publications are listed in Appendix 1, attached. Faculty who are CP members will normally supervise students enrolled in

the CP. Thus, each year, about 6-8 incoming students from HDAP and 3-5 from Psychology will be accepted into the collaborative program at the M.A. level in consultation with their advisors.

As noted, core CP courses will be taught by faculty from each participating department. The two MA-level core courses will constitute the biggest demand on faculty teaching load, but this obligation will be rotated among all members of the CP and thus will fall to HDAP faculty at least twice as often as Psychology Department faculty. Teaching credit will be allocated to one department or the other for each course accordingly. As well, all relevant courses in each department will be made available to all students in the CP to fulfill elective choices. This arrangement already exists informally, and it has provided enrichment to both departments.

Resource Issues

Courses and colloquia will be held in both the HDAP seminar room (Room 9-105) in OISE/UT and in the Psychology Department seminar room (Room 570) in Sidney Smith Hall. In addition, study space will be available in each department for use by all students in the collaborative program. Student supervision will be through the faculty advisor connected to the student's home department. Administrative and academic support will be provided by both departments, through the support staff currently working with the involved faculty. No additional resources will be required other than advertising costs, including the website and brochure. A Developmental Science website and brochure will be created with funding and assistance from both departments. Brochures will be distributed by each department and departmental websites will provide links to the website of the collaborative program.

Preliminary course outline for required PhD level course:

Advanced Seminar in the Methods of Developmental Science
(formal course outline to follow)

The aim of this course is to introduce students to advanced methods in Developmental Science. Prior to taking this course all students will already have taken at least one graduate course in research design and statistics in which basic design and analytic methods in psychology will have been covered. This course will further their methodological training by introducing them to the most current methods being utilized in developmental research.

This half course will cover approximately 8-9 topics. Topics will be covered in one or two sessions, lasting 2-3 hours each, depending on their complexity. Each topic will be covered by a faculty member in the Developmental Science program with expertise in the method being taught. One faculty member will be responsible for course coordination, and this responsibility will be taken in turns by the Department of Human Development and Applied Psychology and the Department of Psychology.

Topics will vary every year depending on the methodological developments in the field. For the first year the following topics (number of sessions in brackets) are envisaged:

Testing causal models using longitudinal data (2)

Methods for the examination of within-family differences in development (1)

Trajectory analysis (1)

Program evaluation: design issues and analytic methods (1)

Devising tasks for assessing age-related changes in perception and cognition (3)

Coding family process from observational data (1)

Interview data in the assessment of parent and child goals during interaction (1)

The use of sequential analysis for social-interaction data (1)

The use of Event-Related Potential (ERP) data in understanding developmental processes (2)

Each instructor will assign reading for his or her session/s and some sessions may involve a lab component in which students will practice the technique. Class discussion and the lab component will represent 25% of their grade. Students will be expected to write two papers. The short paper will be a critique of a method chosen by the student (25% of grade). For the long paper (50% of grade), students will develop a research proposal of their own design based on a particular methodology or combination of methods. Students will be encouraged to focus on research directions relevant to their dissertation topics. Grading will be the responsibility of the course coordinator. Student assignments will be distributed to faculty members familiar with the methods being examined, including the student's supervisor. These assignments will receive comments as well as a recommended grade from that faculty member; however, the choice of final grades will be up to the course coordinator, who will ensure that grades reflect a uniform standard and are assigned equitably.

Cognitive Development and its Applications
HDP 1233
11 September 2002

Instructor: Michel Ferrari
Room 9-132
Tel: (416) 923-6641 ext. 2566
Email: mferrari@oise.utoronto.ca (best way to reach me)
Office hours: Any time, by appointment.

Objective

This course aims to provide an introduction to key approaches to studying human development: (1) Normative-learning theories, (2) stage theories, (3) socio-historical theories; (4) socio-cultural theories, and (5) personal-development theories. These approaches propose different ends for human development. Each theory will be discussed, along with the research in support of it and basic criticisms they make of each other.

Required Text: M. Ferrari (Ed.) (2002). The pursuit of excellence through education. Mahwah, NJ: Erlbaum.

Additional Readings: Will be available at the OISE/UT copy centre on the concourse level.

Syllabus

1. **Introduction**.

Introduction of the Syllabus.
What does it mean to say humans develop?
Internal development of scientific knowledge within paradigms. Developmental science and scientific methods (e.g., postulation; experimentation; modeling; taxonomy; statistics; developmental/historical; narrative)
Relations between human and cognitive development: What is cognition ?
Implicit vs. Explicit
Direct acquaintance (perceptual) vs. Knowledge about (conceptual).

Discussion of these views and their implications for application are the main focus of the course.

2. **Normal Cognitive Development is about Learning new things**.

Begin as a novice
Develop through **learning** (including transfer through analogies and metaphors) and radical conceptual change.
(Learning requires interest and **motivation**)

The end of development is to develop **expertise,** to master existing knowledge (Simon; Ericsson) or, to develop new knowledge through **creativity** (innovation).

This is accomplished through education

Readings
Sternberg, R. J., Grigorenko, E.L., & Ferrari, M. (2002). Developing expertise through judicious practice. In M. Ferrari (Ed.), The pursuit of excellence through education. Mahwah, NJ: Erlbaum.

Chi, M. T. H. (in press). Mechanisms of Conceptual change. Journal of the Learning Sciences.

Additional readings
Flavell. (1992). Cognitive development: Past, present, & Future. Developmental Psychology, 28(6), 998-1005. **(UT e-journal).**

3. **Individual differences: Exceptionally fast or slow development**.
Not all people can learn all things a culture has to offer with equal ease.
Ease at developing expertise can be situated along a normal curve.
Those at the far bottom are *learning disabled* or slow learners; those at the far top are *gifted* or quick learners.

These differences are partly the result of differences in **attitudes and approach to learning** (in attributions, theories of intelligence, and self-efficacy). B**iological differences** in innate potential or the nurturing of that potential also contribute to these observed differences.

Simplistically, the end of development in this case is to shift your position on the curve (for LD to become normal, and for normal to become gifted)

This is accomplished through education

Readings
Zimmerman, B. J. (2002). Achieving academic excellence: A self-regulatory perspective. In M. Ferrari (Ed.), The pursuit of excellence through education (pp. 85-110). Mahwah, NJ : Erlbaum.

Simonton, D. K. (in press). Exceptional Creativity and Chance: Creative Thought as a Stochastic Combinatorial Process. In L.S. Shavinina & M.Ferrari (Eds.), Beyond knowledge: Extracognitive aspects of high ability. New York: Erlbaum**. (e-text)**

Additional readings
Dan Keating, (1990) Charting pathways to the development of expertise. Educational Psychologist. Special Issue: Intelligence and intelligence testing. Vol 25(3-4), pp. 243-267.

4. **Individual differences: Abnormal Development**.
Some people are not slow or fast, they are "abnormal"
The source difference of this is **biological variation** (mental or physical).Or they may have been **injured** in some way (physically or mentally)

These people are supposed to develop through **therapy** (**physical intervention** like medicine for ADHD; or **psychological therapy** for Multiple personality)

The end of development here is for them to become the best they can in their own way (But the implicit contrast is always "species-normal development".)

Readings

Bretherton, I. (1996). Internal working models of attachment relationships as related to resilient coping. (pp. 3-27). In G.G. Noam & K. W. Fischer (Eds.), Development and vulnerability in close relationships. Mahwah, NJ: Erlbaum.

Keating, Daniel P; Miller, Fiona K. (1999). Individual pathways in competence and coping: From regulatory systems to habits of mind. In Keating, Daniel P. (Ed); Hertzman, Clyde (Ed). (1999). Developmental health and the wealth of nations: Social, biological, and educational dynamics (pp. 220-233). New York, NY, US: Guilford Press.

Additional readings

Fagan, T. K. (1992). Compulsory Schooling, child study, clinical psychology, and special education. American Psychologist, 47(2), 236-243. (**UT. e-journal**)

5. Evolutionary Progress

Individual humans vary, but are born with **modules** that can become more or less well developed. During *ontogenesis* (individual brain development). Key transitions in individual abilities occur when new capacities that come on-line at different times.

Development occurs through **maturation** of evolutionarily developed capabilities. This development is species typical and requires no special effort or education, but is can be shaped by education. Sensitive periods are windows for experience; there may be sensitive periods for certain abilities (e.g., perfect pitch).

The end of development is biological maturity. (The child was earlier considered the hope of the race, and the staging ground for social progress; that they recapitulated the progress of the species so far and that human evolution was leading to ever-better forms of psychological experience.)

Readings

Buss, D. (2001). Human nature and culture: An evolutionary psychological perspective. Journal of Personality. Vol 69(6), Dec 2001, pp. 955-978 **(UT e-journal).**

Wellman, H. M. & Gelman, S. A. (1992). Cognitive development: Foundational theories of core domains. Annual Review of Psychology, 43, 337-375.

Additional readings

Scarr, S. (1993). Biological and cultural diversity: The legacy of Darwin for development. Child Development, 64(1), 1333-1353. **(UT e-journal).**

6. **Sociohistorical progress**.
Development is about learning new things of importance to your culture—which itself is developing. (Wertsch). Development occurs within communities of practice and is transmitted through ever more refined cultural tools (e.g., math, language)

The way development occurs is through tutors and experts who help children/novices acquire culture-specific expertise. This involves scaffolding abilities that are still only partially developed in children, but that they can do with help if they are within their **Zone of Proximal Development (ZPD)**. Mentally slow or abnormal children will have a different ZPD than normal children. (Vygotsky)

Particular **learning technologies** (e.g., pencil & paper, books, computer simulations, knowledge Forum) are critical in how particular knowledge-domains develop, and to the sort of scaffolding that can be provided.

The end of development is developing communal expertise and creatively adapting to new challenges posed to the community by changing conditions as required over generations,

Readings
Wertsch, J. V. (1992). L.S. Vygosky and contemporary developmental psychology. Developmental Psychology, 28 (4), 548-557. 978 **(UT e-journal).**

Hewitt, J. & Scardemalia, M. (1998). Design principles for distributed knowledge building processes. Educational Psychology Review, 10 (1), 75-96.

Additional readings
Vygotsky, L.S. (1929/1979) The development of higher forms of attention in childhood. In J.V. Wertsch (Ed.). The concept of activity in Soviet psychology.(pp. 189-240). Armonk, NY: M.E. Sharpe.

7a. The end of development?
The "grand narrative" (Lyotard) of progressive development has been challenged and replaced by a notion of radical subjectivity that is ahistorical (Foucault; Barthes).

7b. No Progress. Sociocultural psychology
The sociocultural view is very similar to Vygotsky's sociohistrorical one, but abandons the idea of progress, and opens the door to relativism and skepticism.

Development now means proceeding from the periphery to the center of a community of practice. Institutions like schools and families assure all members get the necessary training for particular roles in culture (Olson) through socialization/interiorization or **appropriation**. And institutions are themselves cultures. (Sometimes these institutions can perpetuate implicit inequalities by the way institutions are structured and evaluate performance) (Bourdieu).

Linked lives exist within a culture and are important (Elder). For example, the scripts and co-construction of meaning that occurs between parents and children(Nelson; Fivush).

Development now does not end in childhood but continues over the life course (Baltes, Elder).

Readings

Kessen (1990). End of Development.. In W. Kessen, The Rise and Fall of Development, Worcester, Ma.: Clark University Press.

Rogoff, Barbara; Chavajay, Pablo (1995). What's become of research on the cultural basis of cognitive development? American Psychologist. 978- **(UT e-journal).**

Additional readings

Nelson, K. (1993) The psychological and social origins of autobiographical memory. Psychological Science, 4, 7-14.

Gardner, H. (2002). Learning from extraordinary minds. In M. Ferrari (Ed.), The pursuit of excellence through education (pp. 3-20). New York: Erlbaum.

8. Individual progress: Stage Theories of Knowledge development (Genetic Epistemology).

Development is about acquiring ever more sophisticated ways of thinking about things. Developmental progress occurs through equilibration and reflective abstraction.

This occurs in **stages** (Piaget; Case; Fischer; Feldman). **Constructivism** implies novelty is possible, but does not imply teleology (Piaget). At least some of this development is species typical and requires no special effort or education, but it depends on species typical activity (not just maturation) is can be shaped by education.

The end of development is ever more robust knowledge of the world.

Note: Some psychological problems may arise due to early traumatic experiences, and some people have identified a typical sequences of challenges that must be successfully navigated (e.g., Freud's psychosexual stages; Erikson's psychsocial stages).

Readings

Beilin, (1992). Piaget's enduring contribution to developmental psychology. Developmental Psychology, 28 (2), 191-204. **(UT e-journal).**

Feldman, D. H. (2002). Piaget's stages revisited (and somewhat revised) Paper presented at the Annual Meeting of the Jean Piaget Society, Philadelphia, PA, June 8.

Additional readings

Piaget, J. &. Garcia, R. (1983). Psychogenesis and the history of science. New York: Columbia University Press. (last chapter)

9. No Progress. Dynamic Systems Theory

Recent work sees development as occuring through **Self-organizing conceptual structures** (Piaget, Fischer; Lewis) and the stages as more or less stable attractors within culturally given or supported possibilities. (Some work has focused on "**nature via nurture**" in abnormal cases. For example, Karmiloff-Smith's work on rethinking innateness.)

While this view explains how more complex structures emerge, it does not solve the problem of relativism or skepticism. There is a danger of fatalism, in which we are bound to develop according to the sociocultural influences we experience—given our biology—and there is nothing we can do about it.

Readings

Mascolo, M.F., Li, J., Fink, R. & Fischer, K.W. (2002). Pathways to excellence: Value presuppositions and the development of academic and affective skill in educational contexts. (pp.113-146). In M.Ferrari (Ed.). The pursuit of excellence through education (pp. 113-146). Mahwah, NJ: Erlbaum.

Kalchman, M. Moss, J. & Case, R. (2001). Psychological models for the development of mathematical understanding: Rational numbers and functions. In S.M. Carver & D. Klahr (Eds.). Cognition and instruction: Twenty-five years of progress (pp. 1-38). Mahwah, NJ: Erlbaum.

Additional readings

Van Geert, P. (1998). A dynamic systems model of basic developmental mechanisms: Piaget, Vygotsky, and beyond. Psychological Review, 105 (4), 634-677. **(UT e-journal)**

10. **Personal Cognitive Development** as response to this challenge:

Cognitive Development is here considered integral to becoming someone within your culture and persons are considered a symbiosis of biology and culture (Bruner, Dennett). The point is not to describe development objectively, but to express it subjectively.

Cognitive development is manifest through personal biography; development here means personal transformation expressed through some sort of narrative "trouble" that must be resolved. This sometimes is framed within particular kinds of knowledge/psychological experiences are unique to particular times (Hacking's historical ontology.

Personal cognitive deveopment is fostered through **personal education** and through therapy (e.g., **narrative therapy**) that leads people to better articulate what they most value and want to pursue in life to contribute to their culture. Case studies of extraordinary persons within a culture are interesting and important because they show what that culture considers optimal personal development within a cultural domain. (Erikson, Gardner, Grube,; Jin Li).

There are particular ways to be someone called **selfways** (habitus) that are bounded by the cultural space within which one grows and develops; intimately tied to personal narrative (Bruner, Bourdieu, McAdams, Ricoeur, Taylor). These selfways become the end of development.

Readings
Bruner, J. (2001). Self-making and world-making. In J. Brockmeier & D. Carbaugh (Eds.), Narrative and identity: Studies in autobiography, self, and culture. (pp. 25-37). Amsterdam/Philadelphia: John Benjamins.

Ferrari, M. (2002). Personal and institutional pursuit of excellence. In M. Ferrari (Ed.), The pursuit of excellence. Mahwah, NJ: Erlbaum.

Additional readings
Cahan, E. D., & White, S. H. (1992). Proposals for a second psychology. American Psychologist, 47(2), 224-235. **(UT-e-journal)**

11. **Wisdom**.
A. **Mystical Experience** (ideal emotional end)
Personal feelings of deep support and conviction are felt to come from a higher or deeper power, which may be the subconscious mind (James)

B. **Wisdom** (ideal rational end)
The end of development is to become a wise person within one's culture, and ideally, to wisely weigh what is proposed by different cultures (Baltes, Sternberg, Taylor, Varela)

Readings
Baltes, P. B., & Staudinger, U. M. (2000). Wisdom: A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. American Psychologist, 55, 122-136. 978
(UT e-journal).

Varela, (1992/1999). Ethical know-how: Action, wisdom, and cognition. (Lecture 3). Stanford, CA: Stanford University Press.

12. **Care of self**
Care of self is an integration of emotional and rational ideals experienced within a particular culture as how to express the best possible selfway. Wise care of self allows for optimal personal development and for a meaningful denial of death. (Becker, Foucault)

Readings
Foucault, M. (1988). Technologies of the self. In Luther, M., Guttman, H. & Hutton, P.H. (Eds.), Technologies of the self: A seminar with Michel Foucault. Amherst, MA: University of Massachusetts Press. (Seminar held in 1982).

Hacking, (1998). Mad Travelers: Reflections of the reality of transient mental illnesses. Charlottesville: University of Virginia Press. (Chapter 1).

Additional readings

Hacking, I. (2002). Historical ontology. (Chapter 1). Cambridge, MA & London England: Harvard University Press.

13. **Conclusion**.
Review and summary of main points of the course over the whole year.

Readings
Flavell. (1992). Cognitive development: Past, present, & Future. Developmental Psychology, 28(6), 998-1005. **(UT e-journal).**

Taylor, C. (1995). Explanation and practical reason. Chapter 3 in Philosophical arguments. Cambridge, MA: Harvard University Press.

Requirements

All of the course assignments are designed to help you with thinking and writing skills that will be of use in the preparation of your thesis.

(A) Two position papers: These are 2-page papers that compare/contrast any two of the assigned readings. On the first page, outline the authors' general claims or positions, or specify one of several of their arguments. On the second, compare and contrast the claims of both authors; be sure to comment on their claims or arguments, stating whether you agree or disagree with either of them, explaining why, and providing evidence for your position. If you agree, apply the argument to some data from other readings or from your own experience. If you disagree, support your rebuttal with evidence from other readings or from life, or show that the claim is logically flawed. These papers must be no more than two pages in length, and so the writing must be concise. (I will not read more than 2 pages, so if you go over, you will be marked on whatever has been written up until that point.)

(B) One research paper: The "term paper" will be your own study of a single person. You should observe and record an interesting pattern of stability or change in that person's cognitive development according to at least two of the main traditions studied in the course (i.e., Expertise, Sociohistorical, Sociocultural, Individual Stage Theory, or Personal Development). This is an observational case study, not an experiment. Your data can be collected by sampling a person's behaviour or writing (or any other cultural artifacts) products several times during an interesting period—either cultural, e.g., entering kindergarten, or psychological, e.g., 18 months when mirror recognition first occurs (in this case, following a developmental progression week-by-week). If direct observation is impossible or impractical, you can also use interviews.

The key point is to observe your subject before and after some critical juncture, or carefully interview someone in close contact with the person about that time. The main objective is to use developmental theories to interpret the observed pattern -- in particular, to explain this particular pattern for this person given, for example, their age, cognitive level, and cultural milieu. You should begin with an introduction outlining some literature and deriving from it a specific claim or position of your own.

(This is a scaled up version of what you did on the position papers. You don't have to do extensive library research. The course materials can provide almost all of the literature you need. The writing should generally follow APA guidelines.)

Please use the following format, or check with me if you wish to use an alternative format.

1. Introduction (3-5 pages) -- Review the theoretical position(s) that provide(s) a foundation for what you are looking at. Make sure to provide some background on the developmental period and theoretical significance of what you are studying. One way to help organize this section is to specify a prediction, question, or gap in the present theoretical landscape that would be addressed by your study. Make sure to end this section with a specific idea or research question that leads naturally to your study. It is not sufficient to go directly from a literature review to a "Method section" without some conceptual bridge.

2. Method of observation (about 1 page) -- Provide a brief description of your person (and of any other persons significantly involved in the study, e.g., parent), any relevant background information, and the context in which the person was observed (e.g., in school, at the dinner table, with friends).

3. Results (2-4 pages) -- Here is where you present your data/observations. Rather than a detailed description of everything you observed, provide a synopsis of your observations, and include examples, vignettes, or snippets of dialogue to illustrate important issues. When dealing with interviews, include direct quotes.

4. Discussion (2-4 pages) -- Interpret your results using the theoretical framework laid down in your introduction. Make sure to address the specific ideas or questions you put forward, showing how this case study bears on the conceptual issues you raised. The key here is to try to explain the pattern you have observed, and perhaps demonstrate the advantage of one explanation (or theoretical approach) over another. You may also want to speculate on this person's subsequent development, or on new directions for theory and/or research in the field, based on your conclusions.

Note: The **Results** and **Discussion** can be interleaved, such that a portion of your data is followed by an interpretation, another portion followed by another interpretation, and so forth. If you choose this format, you should end with a final section labeled "General Discussion" or "Conclusions."

Maximum length: 12 pages (double-spaced with one-inch margins) -- figures and references may be extra; additional appendices are permitted if these are examples of data or data collection insturments (e.g., drawings; interview protocols). Please number pages.

(C) One brief talk: There will be one informal oral presentation. This is simply a progress report (or, if you haven't started yet, some thoughts about what you'll be looking at) related to your research project. It should require little preparation, and its purpose is to share ideas, identify potential problems, and generate useful feedback. The maximum length will be 15

minutes, so you must be concise. It is best to focus on the study itself, not background theory; leave about 5 minutes for questions and comments.

Evaluation:
Since students' backgrounds tend to be quite diverse, evaluation will reflect effort, involvement and improvement, as well as the overall quality of the assignments. About half the grade comes from the position papers and half from the research paper. You are welcome to show me a brief (half-page maximum) point-form outline of your assignment during the break if you wish additional guidance, but please do so before the due date. Please proof-read and edit your work carefully. Grades may be lowered if the writing (e.g., grammar, punctuation, spelling, sentence structure) is below accepted standards. (Some lenience will be made if English is your second language.)

Due dates:	1st paper	October 16
	2nd paper	November 13
	final paper	December 18

Prof. Michal Perlman
Email: mperlman@oise.utoronto.ca
Office Phone: (416) 923-6641 ext. 2353
Tuesdays, 2:00-5:00, Fall 2002.

Social and Emotional Development and Its Applications
HDE 1249

Sept. 10th Introduction. The biological underpinnings of behavior.

Sept. 17th Historical and theoretical overview
- Freud, S. (1927). The ego and the id. 18-29
- Piaget, J. (1929). The child's conception of the world, 1-32
- Skinner, B.F. (1971). Beyond freedom and dignity, 61-100.

Student Presentation_____

Sept. 24th Methodology: Interviews, Observations, Surveys, Experiments
- Moshman, D. Developmental Psychology. Chapter 3 (Research Methods), p. 68-103.
- Perlman and Ross (1997). The benefits of parent intervention in children's disputes: An examination of concurrent changes in children's fighting styles. Child Development, 64(4), 690-700.

Student Presentation_____

Oct. 1st Theoretical frameworks for understanding environmental influences on children.
- Minuchin, P. (1985). Families and individual development: Provocations from the field of family therapy. Child Development. Special Issue: Family development, 56(2), 289-302.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. Developmental Psychology, 22(6), 723-742

Student Presentation_____

Oct. 8th Attachment and Early Social Behavior
- Fox, N.A. & Henderson, H.A (1999). Does infancy matter? Predicting social behavior from infant temperament. Infant Behavior and Development, 22, 445-555.
- Kochanska, G. (2001). Emotional development in children with different attachment histories: The first three years. Child Development, 72(2), 474-490

Student Presentation_____

Nitza Perlman: Attachment Disorders

Oct. 15th Early Emotional Development

- Campos, J.J. Kermoian, R. & Zumbahlen, M.R. (1992). Socioemotional transformations in the family system following infant crawling onset. Emotion and its regulation in early development. New directions for child development, No. 55: The Jossey-Bass education series (pp. 25-40). San Francisco, CA, US: Jossey-Bass/Pfeiffer.
- Camras, L.A., Dunn, J., Izard, C.E., Lazarus, R., Panskepp, J., Rothbart, M.K., Davidson, R.J. & Ekman, P. (1994). What develops in emotional development? Ekman, P & Davidson, R. J. (Eds), The nature of emotion: Fundamental questions. Series in affective science (pp. 345-375). London, Oxford University Press.

Student Presentation_____

Joanna Cummings: Infant emotional development
SSHRC proposal is due

Oct. 22nd Emotional development and self-regulation.
(From other-control to self-control)

- Muraven, M. and Baumeister, R.F. (2000). Self-regulation and depletion of limited resources: Does self-control resemble a muscle? Psychological Bulletin. Vol 126(2), 247-259.
- Eisenberg, N., Gershoff, E.T., Fabes, R.A., Shepard, S.A., Cumberland A.J., Losoya, S.H., Guthrie, I.K. & Murphy, B.C. (2001). Mother's emotional expressivity and children's behavior problems and social competence: Mediation through children's regulation. Developmental Psychology, 37(4), p. 475-490

Student Presentation_____

Debate 1. Corporal punishment should be outlawed.

Oct. 29th Socialization and Parenting

- Grusec, J. and Goodnow, J. (1994). Impact of parental discipline methods on the child's internalization of values: A reconceptualiation of current points of view, Developmental Psychology, 30, 4-19.
- Kuczynski, L. & Kochanska, G. (1990). Development of children's noncompliance strategies from toddlerhood to age 5. Developmental Psychology, 26(3), 398-408

Student Presentation_____

Susan Bradley: Parenting interventions.

Nov. 5th Peers and children's friendships

- Rubin, K., Coplan, R., Nelson, L., Cheah, C. & Lagace-Sequin, D. (2001). Peer relationships in childhood. In Bornstein and Lamb (Eds.). Developmental Psychology, 4th edition, 451-501, Mahwah, NJ: LEA.
- Hartup, W. (1989). Social relationships and their developmental significance. American Psychologist, 44, 120-126.

Student Presentation_____

Elaine Slavens: Bullying

Nov. 12th Early childhood education and development

- Scarr, S. (1998). American child care today. American Psychologist, 53(2), 1998, 95-108
- Belsky, J. & Eggebeen, D. (1991). Early and extensive maternal employment and young children's socioemotional development: Children of the National Longitudinal Survey of Youth. Journal of Marriage & the Family, 53(4), 1083-1098
- Peisner-Feinberg, E.S., Burchinal, M.R., Clifford, R.M., Culkin, M.L., Howes, C., Kagan, S.L. & Yazejian, N. (2001). The relation of preschool child-care quality to children's cognitive and social developmental trajectories through second grade. Child Development, 72(5), 2001, 1534-1553

Student Presentation_____

Debate 2. Out-of-home care is bad for children.

Nov. 19th Media and other influences

- Huesmann, L.R., Lagerspetz, K. & Eron, L.D. (1984). Intervening variables in the TV violence-aggression relation: Evidence from two countries. Developmental Psychology, 20(5), 746-775
- Rice, M.L., Huston, A.C., Truglio, R. & Wright, J.C. (1990). Words from "Sesame Street": Learning vocabulary while viewing. Developmental Psychology, 26(3), 421-428

Student Presentation_____

Debate 3. Watching television is bad for children.

Lynn Oldershaw: Prosocial development and television programming

Nov. 26th Early conflict and concern for others

- Ross, H. and Conant, C. (1992). The social structure of early conflict. In Shantz, C. and Hartup, WW. (Eds.). Conflict in childhood and adolescent development.
- Zahn-Waxler, C., Radke-Yarrow, M., Wagner, E. and Chapman,

M. (1992). Development of concern for others, Developmental Psychology, 28, 126-136.

Student Presentation_____

Debate 4. Boys are more aggressive than girls.

Empirical assignments are due.

Dec. 3rd Exposure to conflict and divorce

- Amato, P.R. & Keith, B. (1991). Parental divorce and the well-being of children: A meta-analysis. Psychological Bulletin, 110(1), 26-46.
- Davies, P.T. & Cummings, E.M. (1995). Children's emotions as organizers of their reactions to interadult anger: A functionalist perspective. Developmental Psychology, 31(4), 677-68

Student Presentation_____

Debate 4. Couples should stay together for the sake of the children.

COLLABORATIVE MA/PhD PROGRAM IN DEVELOPMENTAL SCIENCE

MEMORANDUM OF AGREEMENT

Memorandum of Agreement concerning a Collaborative Graduate Program in Developmental Science (hereafter, Collaborative Program or Program) including the Department of Human Development and Applied Psychology and the Department of Psychology.

1. In order to develop cooperative and joint graduate education and research in Developmental Science, the collaborating units agree to participate in a Collaborative Program at the MA/PhD levels.

2. The objective of the Collaborative Program is to bring together faculty in developmental psychology, educational psychology, cognitive science, developmental neuroscience, and the treatment and prevention sciences, to form a multi-disciplinary foundation for research and course work concerned with the scientific investigation of human development.

Graduate students in the Program shall register in the School of Graduate Studies through their home graduate units. They shall:

a) meet all respective degree requirements of the School of Graduate Studies and the participating graduate units;

b) meet the course requirements of the Collaborative Program.

These requirements will involve the contribution of relevant courses in the participating home programs. Two existing courses and one new course are intended to serve as core courses for the CP. The existing courses, HDP1233, Cognitive Development and Applications, and HDP 1249, Social-Emotional Development and Applications, will both be redesignated as CP courses. A new course, Advanced Methods for Developmental Science, is in the proposal stage. Additional courses in both departments will serve as a menu of preferred electives for CP students.

3. It is agreed that the Collaborative Graduate Program in Developmental Science shall be administered by a program committee consisting of two graduate faculty members from each participating home program, including a Program Director from one of the units alternating every 3 years.

4. The function of the Program Committee shall include:
   a) the review of all applications and admissions to the collaborative program
   b) selecting a new Director from amongst its membership, as required

5. The Program Committee will meet every two months, or more frequently as needed during the initial stages of the program.

6. The Director of the Collaborative Program shall be selected by the Program Committee for a term of 3 years. The Director's appointment shall be approved by the Dean of the School of Graduate Studies on the recommendation of the Program

Committee after consultation with the Chairs of the participating graduate units.The Director shall oversee admissions, take responsibility for the annual selection of core course instructors, locations, and venues, be available to meet with and advise CP students, and submit a report annually to the School of Graduate Studies. The report shall present the activities of the Program in the past year, including admission, progress and graduation of students.

7. Each participating graduate unit shall retain its statutory control over admissions and program content, and its statutory duty to provide adequate research supervision by a member of the graduate faculty in the unit. The student shall be enrolled in a participating program in the graduate unit in which his or her research is conducted, which is known as the home graduate unit. Administrative and academic support will be provided by both departments, through the support staff currently working with the CP faculty members. No additional resources will be required other than advertising costs, including the website and brochure. A Developmental Science website and brochure will be created with funding and assistance from both departments. Brochures will be distributed by each department and departmental websites will provide links to the website of the collaborative program.

8. The Director of the Collaborative Program shall be responsible for certifying that the requirements of the Program have been fulfilled by each graduating student. The home graduate unit shall recommend the granting of the degree. With the approval of the Collaborative Program Director, the designation “Completed the Collaborative Graduate

Program in Developmental Science" shall be shown on the transcript, upon certification that all requirements of the Collaborative Graduate Program in Developmental Science have been fulfilled.

Courses of Instruction required for the Collaborative MA/PhD Program in Developmental Science:

HDP 1233 Cognitive development and applications

HDP 1249 Social-emotional development and applications

Advanced Methods for Developmental Science

COLLABORATIVE MA/PhD PROGRAM IN DEVELOPMENTAL SCIENCE

MEMORANDUM OF AGREEMENT

SIGNATURE PAGE: UNIT AGREES TO PARTICIPATE

Coordinating Body:

_____ *Date:* _____

[Chair/Director's Name]
[Graduate Unit]

Participating Graduate Units:

_____ *Date:* _____

[Chair/Director]
[Graduate Unit]
[Participating program, including degrees, e.g., M.A./Ph.D. Program in ...]

_____ *Date:* _____

[Chair/Director]
[Graduate Unit]
[Participating program, including degrees, e.g., M.A./Ph.D. Program in ...]